Shopmate™ Series

Issued August 2007 • Index No. DC/12.7

MIG/Multiprocess Welding Power Sources

Quick Specs

Light Industrial Applications
Recreational Vehicle
Trailer Manufacturing
MRO — Maintenance/Repair
Education
Farm/Home

Shopmate 300 Processes
MIG (GMAW)
Flux Cored (FCAW)

Shopmate 300 DX Processes
MIG (GMAW)
Flux Cored (FCAW)
Stick (SMAW)
DC Lift-Arc™ TIG (GTAW)

Input Power 1-Phase Power (primary power cord not included)

Rated Output 250 A at 30 VDC, 60% Duty Cycle
300 A at 32 VDC, 40% Duty Cycle

Amperage Range in CC Mode 5–400 A

Max. Open-Circuit Voltage 80 VDC

Voltage Range in CV Mode 10–35 VDC

Weight **300:** 177 lb (80.3 kg) **300 DX:** 177 lb (80.3 kg)

The Power of Blue®

New!

Shopmate 300 DX MIG Packages (see page 4)

Shopmate 300
Single-phase MIG power source that provides versatility and outstanding arc performance in CV mode (MIG).

Shopmate 300 DX
Single-phase MIG or DC multiprocess capability for versatility with outstanding arc performance in CV mode (MIG) and CC mode (Stick and TIG).

Large, dual digital meters enable the operator to preset weld voltage in CV mode and amperage in the CC mode (DX model only) before striking an arc.

Arc control adjusts inductance to optimize MIG arc performance.

Line voltage compensation keeps output power constant even if input power varies ±10%.

Shopmate 300 Shopmate 300 DX

Built-in 10-pin connector for direct hookup of Spoolmatic® 15A or 30A spool guns.

Built-in 14-pin connector provides quick, direct connection for 14-pin 24 VAC Miller wire feeders and accessories.

Fan-On-Demand™ operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.

Shopmate 300 DX includes:

Process Selector Switch "operator-friendly" single process switch eliminates confusion caused by several switch combinations.

Lift-Arc TIG™ allows DC/TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

TRUE BLUE® 3 YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN USA
APPLETON, WI

Miller®

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Shopmate™ 300 Specifications (Subject to change without notice.)

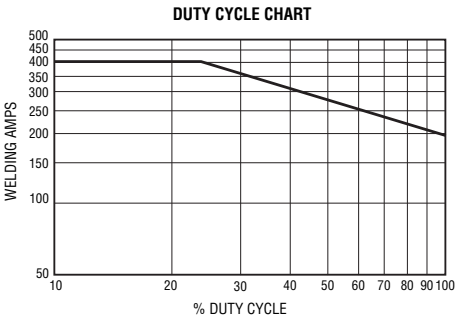
CV DC 1 Phase

Rated Output	Amperage Range	Voltage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz 208 V	230 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
250 A at 30 VDC, 60% Duty Cycle	5–400 A	10–35 V	80 VDC	66	57	29	23	13	11.2	H: 24-1/2 in (622 mm) including lift eye W: 19 in (483 mm) D: 25-1/2 in (648 mm)	177 lb (80.3 kg)

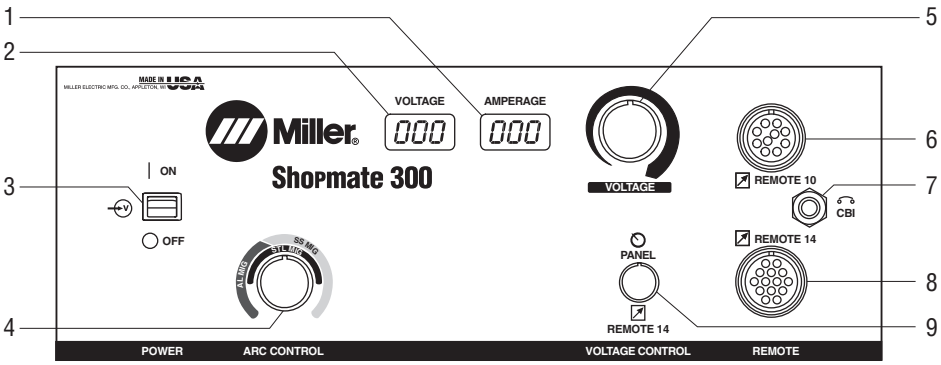
Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

Performance Data



Control Panel



1. Ammeter
2. Voltmeter
3. Power Switch
4. Arc Control
5. Voltage Adjustment Control
6. Remote 10 Receptacle
7. Supplementary Protector CBI
8. Remote 14 Receptacle
9. Voltage Control Switch

Arc Control

Example: Preset for MIG welding with steel wire

Control adjusts inductance for MIG welding. Set Arc Control to desired wire type. Inductance determines the "wetness" of the weld puddle. As setting is increased (rotating Arc Control clockwise), wetness (puddle fluidity) increases. For best results, preset Arc Control to the wire type. Then either increase or decrease setting within wire type scale to make fine adjustment to the welding arc.

Arc Control (Counter Clockwise) Low Inductance Weld Bead

Arc Control (Clockwise) High Inductance Weld Bead

Miller

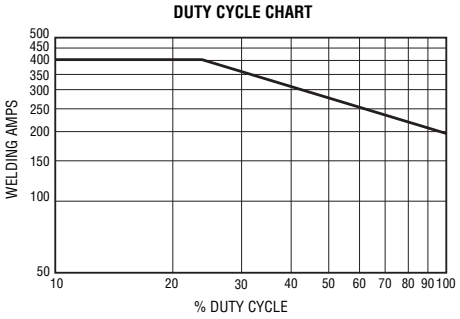
Shopmate™ 300 DX Specifications (Subject to change without notice.)

Rated Output	Amperage Range	Voltage Range	Max. Open-Circuit Voltage	Amps Input at Rated Output, 60 Hz 208 V	230 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
250 A at 30 VDC, 60% Duty Cycle	5–400 A	10–35 V	80 VDC	66	57	29	23	13	11.2	H: 24-1/2 in (622 mm) including lift eye W: 19 in (483 mm) D: 25-1/2 in (648 mm)	177 lb (80.3 kg)

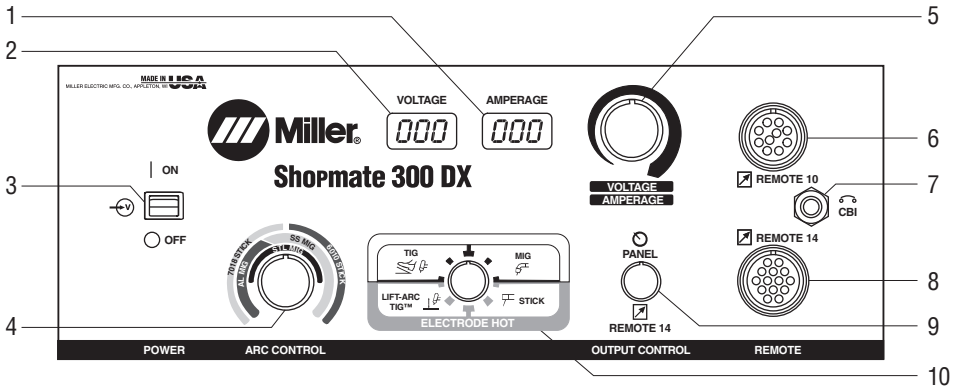
Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

Performance Data

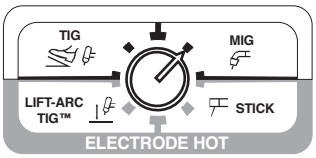


Control Panel



1. Ammeter
2. Voltmeter
3. Power Switch
4. Arc Control
5. Voltage/Amperage Adjustment Control
6. Remote 10 Receptacle
7. Supplementary Protector CBI
8. Remote 14 Receptacle
9. Voltage/Amperage Control Switch
   Control allows selection of either panel or remote 14 for amperage or voltage control.
10. Mode Switch
    Switch determines both the process and output On/Off control. Electrode hot areas in gray are "contactor on" positions.

Arc Control – Inductance/MIG



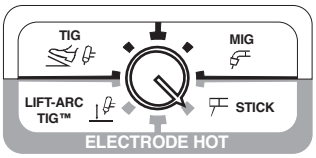
Example: Preset for MIG process and steel wire

Control adjusts inductance for MIG welding. Set Arc Control to desired wire type. Inductance determines the "wetness" of the weld puddle. As setting is increased (rotating Arc Control clockwise), wetness (puddle fluidity) increases. For best results, preset Arc Control to the wire type. Then either increase or decrease setting within wire type scale to make fine adjustment to the welding arc.

Arc Control (Counter Clockwise) Low Inductance Weld Bead

Arc Control (Clockwise) High Inductance Weld Bead

Arc Control – DIG/Stick



Example: Stick Mode, 7018 Electrode

Control adjusts Dig when Stick mode is selected on mode switch. Set Arc Control to desired electrode type. For best results, preset Arc Control in middle of the scale for appropriate electrode type. Then either increase or decrease setting within electrode type scale to make fine adjustment to the welding arc.

Shopmate™ 300 MIG Package Components

Shopmate 300 MIG Package

#951 056 200(208)/230 V
#951 058 230/460/575 V

Comes Complete With:

- Shopmate 300
- 22A wire feeder with Bernard® Q300 15 ft (4.6 m) gun
- MIG Kit **#300 150** including:
  - 15 ft (4.6 m) 1/0 work cable with clamp
  - 10 ft (3 m) 1/0 interconnecting cable
  - Ar/CO_2 regulator with flowtube
  - 10 ft (3 m) gas hose
  - Consumable storage box

Note: MIG Kit can be ordered separately.

Shopmate™ 300 Spool Gun Package Components

Shopmate 300 Spool Gun Package

#951 057 200(208)/230 V
#951 059 230/460/575 V

Comes Complete With:

- Shopmate 300
- Spoolmatic® 30A spool gun
- Spool Gun Kit **#300 151** including:
  - 15 ft (4.6 m) 1/0 work cable with clamp
  - Ar/CO_2 regulator with flowtube
  - Consumable storage box

Note: Spool Gun Kit can be ordered separately.

Shopmate™ 300 DX MIG Package Components

Shopmate 300 DX MIG Package

#951 076 200(208)/230 V
#951 077 230/460/575 V

Comes Complete With:

- Shopmate 300 DX
- 22A wire feeder with Bernard® Q300 15 ft (4.6 m) gun
- MIG Kit **#300 150** including:
  - 15 ft (4.6 m) 1/0 work cable with clamp
  - 10 ft (3 m) 1/0 interconnecting cable
  - Ar/CO_2 regulator with flowtube
  - 10 ft (3 m) gas hose
  - Consumable storage box

Note: MIG Kit can be ordered separately.

Upgrade Benefits

Features	Millermatic® 252	Shopmate 300	Shopmate 300 DX	Millermatic® 350	Millermatic® 350P
Input Voltage	1-Phase	1-Phase	1-Phase	1-Phase/3-Phase	1-Phase/3-Phase
Input Amperage at Rated Output	42 A, 230 VAC (1-Phase)	57 A, 230 VAC (1-Phase)	57 A, 230 VAC (1-Phase)	61 A, 230 VAC (1-Phase)	61 A, 230 VAC (1-Phase)
Rated Output	200 A at 60%	250 A at 60%	250 A at 60%	300 A at 60%	300 A at 60%
Process	MIG	MIG	MIG, DC Stick, DC TIG	MIG	MIG, Pulsed MIG
Arc Control	Active Arc Stabilizer	MIG — variable inductance	MIG — variable inductance Stick — variable DIG	MIG — inductance control	MIG — inductance control Pulsed — SharpArc® (arc width)
Wirefeed System	All in one, 2 drive rolls	14-pin remote Miller wire feeder	14-pin remote Miller wire feeder	All in one, angled 4 drive rolls	All in one, angled 4 drive rolls

Genuine Miller Accessories

Wire Feeders

22A #193 066
24A #195 112
Simple, reliable, 24 VAC constant-speed semiautomatic wire feeder, best suited for small diameter wires. Accommodates up to 60 lb (27.2 kg) spool of welding wire when using optional wire reel assembly. 24A includes remote voltage and four gear-driven drive rolls for larger wire sizes. 22A and 24A wire feeders come with FREE Bernard® Q™-Gun! See Lit. Index No. M/11.0.

70 Series

Single Wire Models
S-74S #195 057
S-74D #195 058
S-74DX #195 059

Dual Wire Models
D-74S #195 060
D-74D #195 061
D-74DX #195 062

Heavy-duty, industrial, constant-speed 24 VAC semiautomatic wire feeders in single and dual models, with available digital meters. Ideal for high-duty-cycle MIG welding (GMAW) and Flux Cored welding (FCAW). Accommodates a wide variety of wire sizes and types. Comes with FREE Bernard® Q™-Gun! Dual wire feeder models include two FREE Q-Guns. See Lit. Index No. M/3.0.

XR™-Control #181 538
Push-pull wire feed system offers unparalleled performance for aluminum MIG welding. See Lit. Index No. M/1.7.

Shopmate™ 300 MIG Kit #300 150
Includes 15 ft (4.6 m) 1/0 work cable with clamp, 10 ft (3 m) 1/0 interconnecting cable, Ar/CO_2 regulator with flowtube, 10 ft (3 m) gas hose and consumable storage box.

Spoolmatic® 15A Spool Gun #195 156
Spoolmatic® 30A Spool Gun #130 831
Ideal for aluminum welding jobs. 200 amp, 100% duty cycle, air-cooled, 1 lb spool gun with your choice of 15 ft (4.6 m) or 30 ft (9.1 m) cable assembly. For detailed information, see Spoolmatic literature, Index No. M/1.5.

Shopmate™ 300 Spool Gun Kit #300 151
Includes 15 ft (4.6 m) 1/0 work cable with clamp, Ar/CO_2 regulator with flowtube, and consumable storage box.

Genuine Miller Accessories (Continued)

Remote Controls and Switches

RMLS-14 #129 337
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord and 14-pin plug.

RCC-14 Remote Contactor and Current Control #151 086
Rotary-motion (side to side) fingertip control. Fastens to TIG torch using two Velcro strips. Allows complete current and contactor control at operator's fingertips. Includes 28 ft (8.5 m) cord and plug.

RCCS-14 Remote Contactor and Current Control #043 688
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 28 ft (8.5 m) control cord.

RHC-14 Hand Control
#129 340 20 ft (6 m) cord
Miniature hand control with 14-pin plug for remote current and contactor control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm).

RFCS-14 Foot Control #043 554
Heavy-duty foot current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

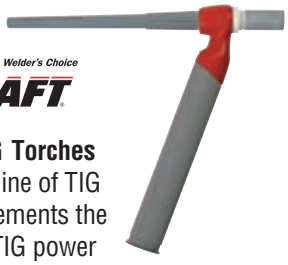
Extension Cables for 14-Pin Plugs to 14-Pin Sockets
#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.8 m)
This extension cord makes a direct connection between the power source and the accessory control or wire feeder. No messy splicing or adapting required.

No. 2 Stick Cable Set
#195 196 15 ft (4.6 m)
Consists of 15 ft (4.6 m) No. 2 electrode cable and holder, and 15 ft (4.6 m) work cable and clamp. 200 A, 100% duty cycle.

No. 2 Stick Cable Set
#195 195 50 ft (15.2 m)
Consists of 50 ft (15.2 m) No. 2 electrode cable and holder, and 50 ft (15.2 m) work cable and clamp. 200 A, 100% duty cycle.

Shopmate™ 300 Running Gear/ Dual Cylinder Rack #300 145
The large 10 in (254 mm) rear wheels and 4 in (102 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source around and over cables and cracks. Very easy to install. Handles double as weld cable holder. Holds two cylinders.

TIG (GTAW) Torches



Weldcraft® TIG Torches
The Weldcraft line of TIG torches complements the most popular TIG power source line available today. The Weldcraft torch line includes both air-cooled and water-cooled models. Available with genuine Weldcraft parts.

Air-Cooled Torch #WTP17VRM
150 amp air-cooled TIG torch with valve, flowmeter and 25 ft (7.6 m) cables.

Air-Cooled Torch #WTP26VRM
200 amp air-cooled TIG torch with valve, flowmeter and 25 ft (7.6 m) cables.

TIG (Gas Tungsten Arc Welding) Handbook #170 555
To order, call the Miller Literature Distribution Center at 1-920-751-2120, or FAX 1-920-751-2121. A comprehensive, text on all aspects of the TIG process.

Notes

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Power Source				
Shopmate™ 300 (primary power cord not included)	**#907 313**	200(208)/230 V, 60 Hz		
	#907 314	230/460/575 V, 60 Hz		
Shopmate™ 300 MIG Package (primary power cord not included)	**#951 056**	200(208)/230 V, 60 Hz model with 22A wire feeder, Bernard® Gun and MIG Kit.		
	#951 058	230/460/575 V, 60 Hz model with 22A wire feeder, Bernard® Gun and MIG Kit.		
Shopmate™ 300 Spool Gun Package (primary power cord not included)	**#951 057**	200(208)/230 V, 60 Hz model with Spoolmatic® 30A spool gun and Spool Gun Kit.		
	#951 059	230/460/575 V, 60 Hz model with Spoolmatic® 30A spool gun and Spool Gun Kit.		
Shopmate™ 300 DX (primary power cord not included)	**#907 315**	200(208)/230 V, 60 Hz		
	#907 316	230/460/575 V, 60 Hz		
Shopmate™ 300 DX MIG Package (primary power cord not included)	**#951 076**	200/230 V, 60 Hz model with 22A wire feeder, Bernard® Gun and MIG Kit.		
	#951 077	230/460/575 V, 60 Hz model with 22A wire feeder, Bernard® Gun and MIG Kit.		
Accessories				
Shopmate™ 300 MIG Kit	**#300 150**	15 ft (4.6 m) 1/0 work cable with clamp, 10 ft (3 m) 1/0 interconnecting cable, regulator with flowtube, 10 ft (3 m) gas hose and consumable storage box		
Shopmate™ 300 Spool Gun Kit	**#300 151**	15 ft (4.6 m) 1/0 work cable with clamp, regulator with flowtube, and consumable storage box		
Standard Running Gear/ Dual Cylinder Rack	**#300 145**			
Wire Feeders/Guns				
22A	**#193 066**	See Lit. Index No. M/11.0		
24A	**#195 112**	See Lit. Index No. M/11.0		
70 Series		See page 5		
XR™-Control	**#181 538**	See Lit. Index No. M/1.7		
Spoolmatic® 15A	**#195 156**			
Spoolmatic® 30A	**#130 831**			
Remote Controls				
RMLS-14	**#129 337**	Rocker switch		
RCC-14	**#151 086**	Fingertip control (side to side)		
RCCS-14	**#043 688**	Fingertip control (up and down)		
RHC-14	**#129 340**	Hand control w/20 ft (6 m) cord and 14-pin plug		
RFCS-14	**#043 554**	Foot control		
Extension Cables		See page 6		
No. 2 Stick Cable Set	**#195 196**	15 ft (4.6 m)		
No. 2 Stick Cable Set	**#195 195**	50 ft (15.2 m)		
TIG Welding				
Weldcraft® TIG Torches	**#WTP17VRM**	150 A, 25 ft (7.6 m) air-cooled with valve and flowmeter		
	#WTP26VRM	200 A, 25 ft (7.6 m) air-cooled with valve and flowmeter		
Educational Resources				
TIG (Gas Tungsten Arc Welding) Handbook	**#170 555**			

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

XMT® 304/456 CC/CV

Issued February 2008 • Index No. DC/18.8

Multiprocess Welding Power Source

Quick Specs

Heavy Industrial Applications
Construction
Shipbuilding
Railroad
Truck/Trailer Manufacturing
Fabrication
Repair Shops
Rental Fleets

Processes
MIG (GMAW)/Pulsed MIG (GMAW-P)
Stick (SMAW)
TIG (GTAW)
Flux Cored (FCAW)
Air Carbon Arc Cutting and Gouging (CAC-A)

Input Power
304: Requires 3- or 1-Phase Power
456: Requires 3-Phase Power

Output Power
304: 10–35 V, 5–400 A
456: 10–38 V, 5–600 A

Weight
304: Net: 79.5 lb (36.1 kg) Ship: 88.6 lb (40.2 kg)
456: Net: 118 lb (53.5 kg) Ship: 129 lb (58.5 kg)

The Power of Blue®

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Line voltage compensation keeps welding output constant even if input power varies by +/-10%.

XMT 304 CC/CV
with Auto-Link®

XMT 456 CC/CV
with Manual Link

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance.

Large, dual digital meters are easy to view and are presettable to ease setting weld output.

Process selector switch reduces the number of control setup combinations without reducing any features.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Pulsed MIG capabilities with optional Optima control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emission.

115 VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc. *Standard on XMT 456, optional on XMT 304.*

TRUE BLUE® 3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN USA
APPLETON, WI

Miller®

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

XMT® 304 CC/CV Specifications (Subject to change without notice.)

Input Power	Rated Output at 60% Duty Cycle	Voltage Range in CV Mode	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz, 208 V	230 V	400 V	460 V	575 V	KVA	KW	Dimensions	Weight
Three-Phase	300 A at 32 VDC	10–35 V	5–400 A	90 VDC	33.7	30.5	17	18.9	15.2	12.2	11.6	H: 17 in (432 mm) W: 12-1/2 in (318 mm) D: 24 in (610 mm)	79.5 lb (36.1 kg)
Single-Phase	225 A at 29 VDC	10–35 V	5–400 A	90 VDC	52.4	47.4	—	24.5	—	11.3	7.6		

Certified to both the Canadian and U.S. Standards for welding equipment.

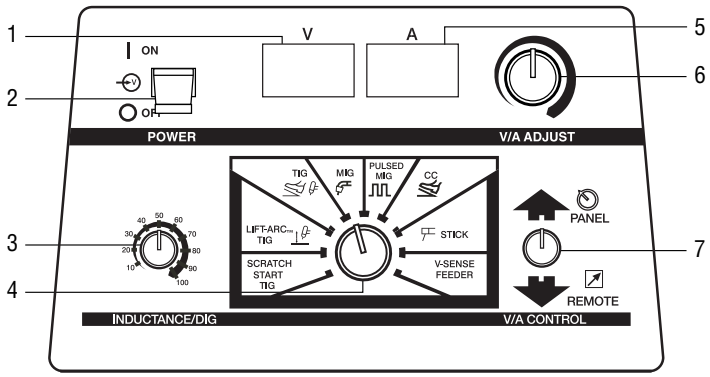
XMT® 304 CC/CV Control Panel

Additional Features

Auto-Link® circuit automatically links the power source to primary voltage being applied (230/460 or 460/575 VAC, single- or three-phase).

Ultra-tough, polycarbonate-blended cover for control panel protects front controls from damage.

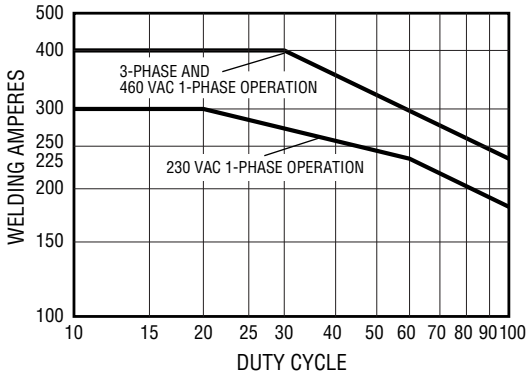
International-style weld disconnects provide high-quality weld cable connections. (Two connectors supplied with each unit.)



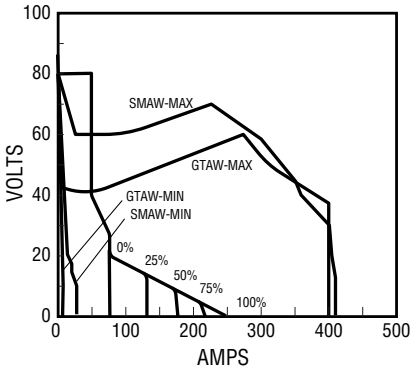
1. Voltmeter
2. Power On/Off Switch
3. Inductance/Dig Control
4. Process Selector Switch (Rotary Switch)
5. Ammeter
6. Voltage/Amperage Adjustment Control
7. Voltage/Amperage Control Switch

XMT® 304 CC/CV Performance Data

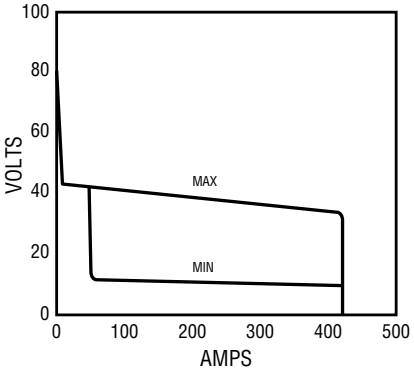
DUTY CYCLE CHART



CC VOLT/AMP CURVE



CV VOLT/AMP CURVE



XMT® 456 CC/CV Specifications (Subject to change without notice.)

Input Power	Rated Output	Voltage Range in CV Mode	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz 230 V	400 V	460 V	575 V	KVA	KW	Dimensions	Weight
Three-Phase	450 A at 38 VDC, 100% Duty Cycle 565 A at 43 VDC, 60% Duty Cycle	10–38 V	5–600 A	95 VDC	50.8	31	27.8	24.4	21.2	19.2	H: 17 in (432 mm) W: 14-1/2 in (368 mm) D: 26 in (660 mm)	118 lb (53.5 kg)

Certified to both the Canadian and U.S. Standards for welding equipment.

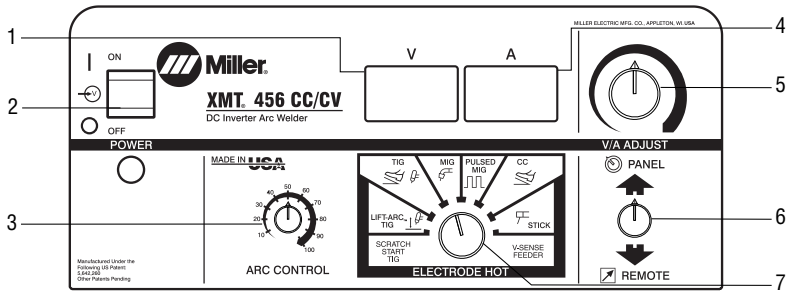
XMT® 456 CC/CV Control Panel

Additional Features

Primary voltage display shows what primary voltage the power source is linked for without removing the side panels. Saves time and assures you that the power source has been correctly linked for available input voltage.

Unique case design helps protect internal components from dirt and dust. To connect input power cord and/or set unit up for correct input power, remove the easy-to-handle panel (1/3 case). The remaining two-thirds of the case never needs to be removed!

Optional remote on/off provides ability to turn power source on or off when it is located away from your work.

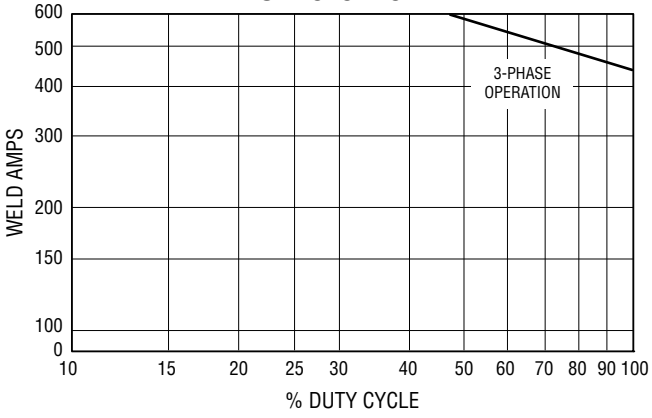


Note: XMT 456 is equipped with Stud for ring-lug output connections.

1. Voltmeter
2. Power On/Off Switch
3. Arc Control
4. Ammeter
5. Voltage/Amperage Adjustment Control
6. Voltage/Amperage Control Switch
7. Process Selector Switch (Rotary Switch)

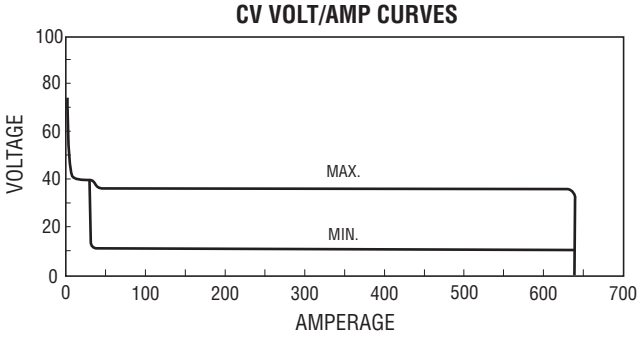
XMT® 456 CC/CV Performance Data

DUTY CYCLE CHART

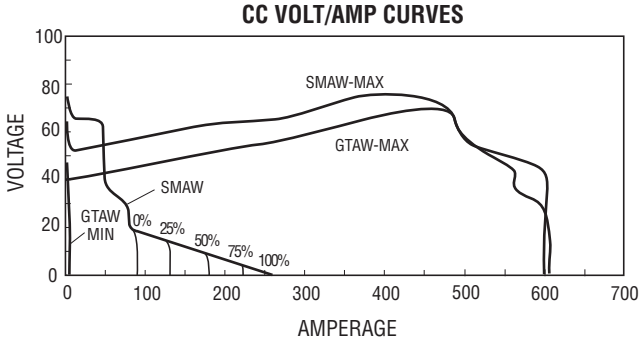


Volt/amp curves show minimum and maximum voltage and amperage output capabilities of unit. Curves of other settings fall between curves shown.

CV VOLT/AMP CURVES



CC VOLT/AMP CURVES



XMT® MIGRunner™ Components

XMT® 304 MIGRunner™ #907 061

Comes Complete With:

- XMT 304 CC/CV power source
- 22A wire feeder
- Bernard® Q400 MIG Gun
- Consumables
- .035/.045 in drive roll kit
- Regulator/flow gauge with gas hose
- MIGRunner Cart with cylinder rack
- Bottom tray will hold optional Coolmate 3 (sold separately)

Genuine Miller Accessories

Process Selector Control #042 872
Designed for use with dual wire feeders, applications where electrical isolation and/or polarity reversing of weld current is required, and for welding process changes. Includes 115 VAC/2 amp receptacle, two 14-pin receptacles and a 10 ft (3 m) 14-pin cord.

RFCS-14 Foot Control #043 554
Heavy-duty foot current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

RHC-14 Hand Control #129 340
Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm). Includes 20 ft (6 m) cord and 14-pin plug.

RMLS-14 #129 337 14-pin plug
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord.

RCC-14 Remote Contactor and Current Control #151 086 14-pin plug
Rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 28 ft (8.5 m) control cord.

RCCS-14 Remote Contactor and Current Control #043 688
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 28 ft (8.5 m) control cord.

Extension Cords for Remote Controls and 24 VAC Wire Feeders
#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.8 m)
14-pin plug to 14-pin socket.
Note: Not for use with Optima or 60M Series.

Genuine Miller Accessories (continued)

Optima™ #043 389
A multipurpose, microprocessor-based pulse control for both synergic MIG (wire welding or GMAW) or manual MIG pulsing. Use this control with the XMT 304 CC/CV power sources and any Miller wire feeder, including automatic feeders and spool guns. Includes a 25 ft (7.6 m) cord with 14-pin plug.

Extension Cords for Optima
#043 725 25 ft (7.6 m)
#043 726 50 ft (15.2 m)
#043 727 75 ft (22.9 m)

WC-24 Weld Control
#137 549
Designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. For use with Spoolmatic 30A spool gun.

WC-115A Weld Control
#137 546-01-1
Operates on 115 VAC and is designed for power sources without a 14-pin receptacle. For use with Spoolmatic 30A spool gun. Includes 10 ft (3 m) wall-type plug and power cord.

HF-251D-1
High-Frequency Arc Starter and Stabilizer
#042 388
Portable 250 amp, 60% duty cycle unit adds high frequency to the welding circuit to help start the arc when using the DC TIG (GTAW) process. Operates on 115 VAC, 50/50 Hz. See Lit. Index No. AY/5.1.

Inverter Racks

Four or Six-Arc Welding System
The Inverter Rack conveniently houses multiple XMT power sources for multiple welders. Both 4-pack and 6-pack models are available.
Features include:
- Provision to parallel power sources or common work connections
- Two lifting eyes for transportation
- Rugged skids for dragging or pushing
- Customer can install up to a maximum of 4 XMT 456 power sources

For detailed information on customized Inverter Rack systems see Lit. Index No. DC/18.81.

Running Gear

MIGRunner™ Cart
#195 445 (For 304 models only)
MIGRunner™ XL Cart
#195 246 (For all models)
Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

XMT Cylinder Cart
#042 537
Carries two 160 lb (72.6 kg) gas cylinders, or one gas cylinder and one coolant system for TIG (GTAW) welding. Feeder mounts to tray above power source.

Universal Carrying Cart and Cylinder Rack #042 934 (For 304 models only)
Holds power source, and gas cylinder up to 56 in (142.2 cm) high measuring 6 to 9 in (15.2 to 22.8 cm) in diameter.

Protective Cover

#195 478
Mildew and water resistant, odor-free cover protects your machine's finish. For 300/350 A inverters: XMT, Maxstar and Dynasty.

Wire Feeders/Guns

SuitCase™ X-TREME™ 8VS #300 093
SuitCase™ X-TREME™ 12VS #195 500
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8VS) or 12in (12VS) spool of wire. Operates on open-circuit voltage eliminating the need for a control/power cord. See Lit. Index No. M/6.41.

SuitCase™ 8RC/12RC #194 938/#194 940
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8RC) or 12in (12RC) spool of wire. Operates using 14-pin control receptacle. See Lit. Index No. M/6.5.

XR Control #181 538
Push-pull wire feed system offers unparalleled performance for aluminum MIG welding. See Lit. Index No. M/1.7.

70 Series
S-74S #195 057
S-74D #195 058
S-74DX #195 059
Heavy-duty, industrial, constant-speed 24 VAC semiautomatic wire feeders with available digital meters. Ideal for high-duty-cycle MIG welding (GMAW) and Flux Cored welding (FCAW). Accommodates a wide variety of wire sizes and types. Comes with FREE Bernard® Q™-Gun! See Lit. Index No. M/3.0.

Spoolmatic® 30A #130 831
A 1-lb, air-cooled spool gun that extends the weld process range by adding a handy portable system for small wire MIG. Rated 200 A at 100% duty cycle. Includes 30 ft (9.1 m) cable assembly. (WC-24 #137 549 for 14 pin.)

Roughneck® C-Series MIG Guns
See Lit. Index No. AY/17.0.

Ironmate™ Flux Cored Guns
See Lit. Index No. AY/16.0.

FC-1260
#195 732 10 ft (3 m)
#195 729 15 ft (4.6 m)

FC-1260LM
#194 912 10 ft (3 m)
#194 911 15 ft (4.6 m)

FC-1150
#194 864 10 ft (3 m)
#194 863 15 ft (4.6 m)

Water Coolant Systems

For more information, see the Miller Coolant Systems literature sheet, Index No. AY/7.2.

Coolmate™ 3
#043 007 115 VAC
#043 008 230 VAC
For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy-fill spout.

Coolmate™ V3 #043 009 115 VAC
For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

Coolmate™ 4 #042 288 115 VAC
For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

TIG Coolant
#043 810
Sold in multiples of 4. Pre-mixed low-conductivity Miller coolant contains ethylene glycol and deionized water to protect from freezing and boiling -37˚ to 227˚F (-38˚ to 108˚C). Coolant contains 2.4% algae growth inhibitor. 1-gallon plastic recyclable bottles.

International-Style Connectors

Note: XMT 304 power sources are equipped with International-style connectors for secondary connections. (Power source is shipped with two 50-mm male International-style plugs for use with #1 or #2 AWG size cable.)

International/Tweco®
Adapter #042 465
International/Cam-Lok
Adapter #042 466

One-piece adapter with International-style male plug (to power source) on one end and female receptacle (Tweco or Cam-Lok for weld cable connection) on other end.

International-Style Connector Kit

#042 418 50 mm
Accepts #4 or #1/0 AWG cable size. Required if male plugs shipped with power source must be replaced, or if additional plugs are needed.

#042 533 70 mm
Accepts #1/0 or #2/0 AWG cable size. Required if #1/0 or #2/0 AWG size cable is to be used.

Kit includes one International-style male plug which attaches to the work and/or weld cables and plugs into the International-style receptacles on the power source.

Extension Kit for International-Style Cable Connectors

#042 419 50 mm
Accepts #4 or #1/0 AWG size cable.

#042 534 70 mm
Accepts #1/0 or #2/0 AWG size cable.

Used to adapt or extend weld and/or work cables. Kit includes one male International-style plug and one in-line female International-style receptacle.

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
XMT® 304 CC/CV	**#903 471** **#903 471-01-1** **#903 473** **#903 472**	208-230/460 VAC with Auto-Link® 208-230/460 VAC with Auto-Link® and Auxiliary Power 460/575 VAC with Auto-Link® 400 VAC, 50/60 Hz with Auxiliary Power and **CE**		
XMT® 304 MIGRunner™ Package	**#907 061**	208-230/460 VAC with Auto-Link®		
XMT® 456 CC/CV	**#907 010** **#907 010-01-1** **#907 011** **#907 012**	230/460 VAC 230/460 VAC with Remote On/Off 575 VAC 400 VAC with **CE**		
Inverter Racks (full or empty)		See Lit. Index No. DC/18.81		
Accessories				
Process Selector Control	**#042 872**			
HF-251D-1 HF Starter/Stabilizer	**#042 388**	See Lit. Index No. AY/5.1		
RFCS-14	**#043 554**	Foot control		
RHC-14	**#129 340**	Hand control		
RMLS-14	**#129 337**	Rocker switch		
RCC-14	**#151 086**	Fingertip control		
RCCS-14	**#043 688**	Fingertip control		
Extension Cords (For 24 VAC wire feeders and remote controls)		See page 4. Not to be used with Optima or 60M		
Optima™ MIG Pulse Control	**#043 389**			
Optima™ Extension Cords		See page 5		
WC-24	**#137 549**	For use with Spoolmatic 30A and power sources **with** 14-pin		
WC-115A	**#137 546-01-1**	For use with Spoolmatic 30A and power sources **without** 14-pin		
Running Gear				
MIGRunner™ Cart	**#195 445**	For XMT 304 models only		
MIGRunner™ XL Cart	**#195 246**	For all models		
XMT Cylinder Cart	**#042 537**	For all models		
Universal Carrying Cart and Cylinder Rack	**#042 934**	For XMT 304 models only		
Protective Cover	**#195 478**			
Wire Feeders/Guns				
SuitCase™ X-TREME™ 8VS/12VS	**#300 093 / #195 500**	See Lit. Index No. M/6.41		
SuitCase™ 8RC / 12RC	**#194 938 / #194 940**	See Lit. Index No. M/6.5		
XR Control	**#181 538**	See Lit. Index No. M/1.7		
70 Series	**#195 057** **#195 058** **#195 059**	S-74S. See Lit. Index No. M/3.0 S-74D. See Lit. Index No. M/3.0 S-74DX. See Lit. Index No. M/3.0		
Spoolmatic® 30A Spool Gun	**#130 831**	Includes 30 ft (9.1 m) cable assembly		
Bernard® Q™-Series MIG Guns		See Welding Components and Parts Guide		
Ironmate™ Flux Cored Guns		See Lit. Index No. AY/16.0		
Water Coolant Systems		See page 6. See Lit. Index No. AY/7.2		
International-Style Connectors		See page 7		

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

XMT® 350 Series

Issued October 2007 • Index No. DC/18.83

Multiprocess Welding Power Source

Quick Specs

Heavy Industrial Applications
Construction
Shipbuilding
Railroad
Truck/Trailer Manufacturing
Fabrication
Repair Shops
Rental Fleets
Power Generation Plants

Processes
MIG (GMAW)/Pulsed MIG (GMAW-P)*
Stick (SMAW)
TIG (GTAW)
Flux Cored (FCAW)
Air Carbon Arc Cutting and Gouging (CAC-A)
**XMT-350 MPa; XMT 350 CC/CV with required optional control; not available with XMT 350 VS model.*

Input Power	Requires 3- or 1-Phase Power, 208–575 VAC, 50/60 Hz
Rated Output	10–38 V, 5–425 A
Weight	Net: 80 lb (36.3 kg) Ship: 89.1 lb (40.4 kg)

The Power of Blue®

XMT 350 CC/CV

XMT 350 VS

New!

XMT 350 MPa with Built-In Pulse MIG (see page 4)

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through machine.

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

The XMT 350 Series is packed with features to meet the most demanding welding needs.

Please see page 2 to determine which model is right for your application.

Auto-Line™ Power Management Technology allows for any input voltage hook-up (208–575 V) with no manual linking required, providing convenience in any job setting. Ideal solution for dirty or unreliable input power.

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance, and outstanding MIG weld performance.

Line voltage compensation keeps welding output constant even if input power varies by +/-10%. XMT 350 models further expand line voltage compensation on 460 VAC to an amazing +37%, -59%.

Process selector switch reduces the number of control setup combinations without reducing any features.

Large, dual digital meters are easy to view and are presettable to ease setting weld output.

TRUE BLUE® 3YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.
Gun warranted for 90 days, parts and labor.

MADE IN USA
APPLETON, WI

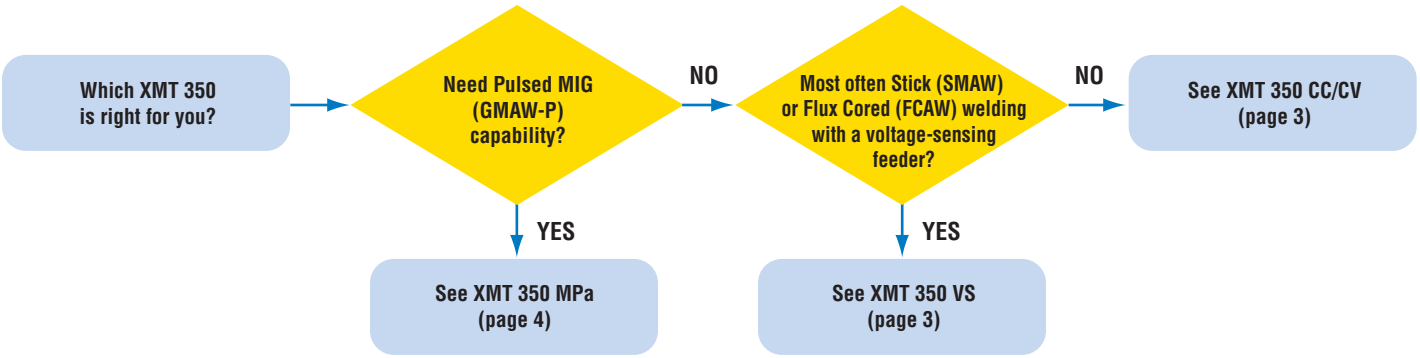
Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Which XMT® is Right for You?


Which XMT 350 is right for you?
Need Pulsed MIG (GMAW-P) capability?
NO
Most often Stick (SMAW) or Flux Cored (FCAW) welding with a voltage-sensing feeder?
NO
See XMT 350 CC/CV (page 3)
YES
See XMT 350 MPa (page 4)
YES
See XMT 350 VS (page 3)

Amperage Class*	Power Processing	Industrial Inverters	Remote Capability	Process Capability	Pulsed MIG Capability	Connectors	Auxiliary Power	For more Information
300 A	Auto-Link®	XMT 304 CC/CV, 230/460 VAC	Yes	Stick, DC TIG, MIG, CAC-A	Optima™ Pulse Control Required	Dinse only	Optional	Lit. No. DC/18.8
350 A	Auto-Line™	XMT 350 MPa, 208–575 VAC	Yes		Built-In	Dinse or Tweco	Optional	Page 4
		XMT 350 CC/CV, 208–575 VAC	Yes		Optima™ Pulse Control Required	Dinse or Tweco	Optional	Page 3
		XMT 350 VS, 208–575 VAC	No		No	Tweco only	No	Page 3
565 A	Manual	XMT 456 CC/CV, 230/460 VAC	Yes		Optima™ Pulse Control Required	Ring Lug only	Standard	Lit. No. DC/18.8

**60% Duty Cycle Rating*

XMT® 350 Specifications (Subject to change without notice.)

Input Power	Rated Output at 60% Duty Cycle	Voltage Range in CV Mode	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz, 208 V	230 V	400 V	460 V	575 V	KVA	KW	Dimensions	Weight
Three-Phase	350 A at 34 VDC	10–38 V	5–425 A	75 VDC	40.4	36.1	20.6	17.8	14.1	14.2	13.6	H: 17 in (432 mm) W: 12-1/2 in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
Single-Phase	300 A at 32 VDC	10–38 V	5–425 A	75 VDC	60.8	54.6	29.7	24.5	19.9	11.7	11.2		

Certified to both the Canadian and U.S. Standards for welding equipment.

Additional Features

Exceptional electrical efficiency. At 400 A, efficiency is 87.24%!

350 A of welding output at 60% duty cycle with superior low-end performance.

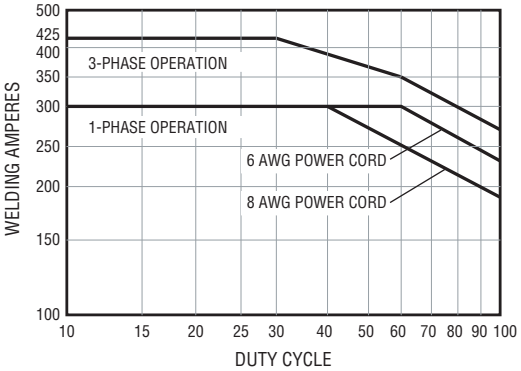
Power factor of .95 enables smaller fuses/breakers and primary wiring. Primary amperage draw at rated output is 25% less than the competition.

Ultra-tough, polycarbonate-blended cover for control panel protects front controls from damage.

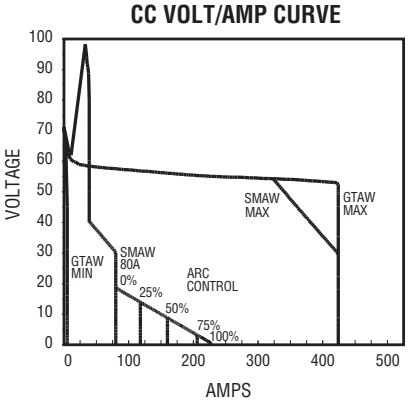
Optional gas solenoid for TIG welding.

XMT® 350 Performance Data

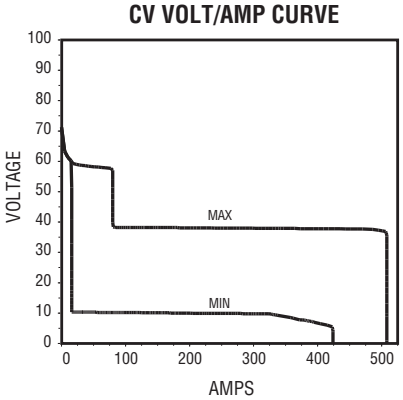
DUTY CYCLE CHART



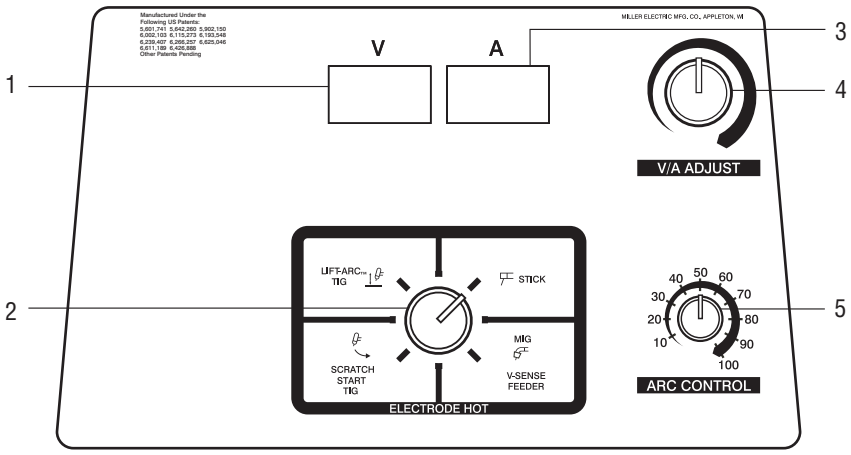
CC VOLT/AMP CURVE



CV VOLT/AMP CURVE



XMT® 350 VS Control Panel



1. Voltmeter
2. Process Selector Switch (Rotary Switch)
3. Ammeter
4. Voltage/Amperage Adjustment Control
5. Arc Control

NOTE: ***VS model is equipped with Tweco-style output connector.***

Additional Features

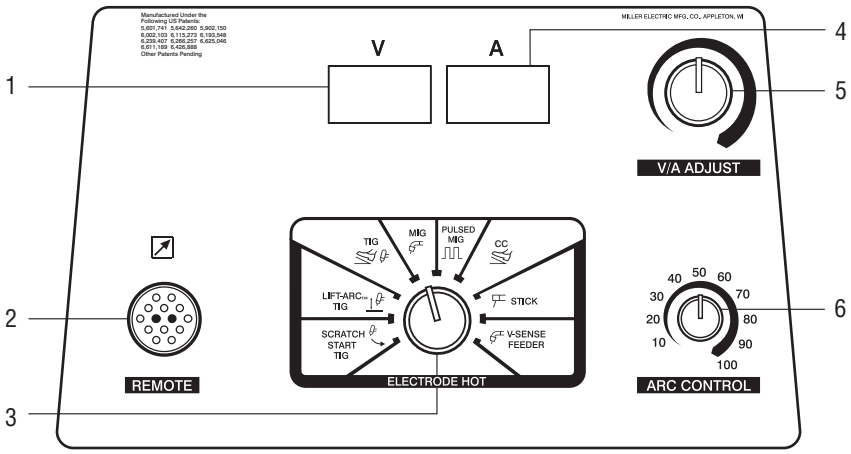
Low OCV Stick — A built-in, selectable feature, that reduces the Stick mode open-circuit voltage (OCV) to nearly 15 volts when the welding power source is not in use. Eliminates the need for add-on voltage reducers.

Note: VS model is available only with Tweco-style weld cable disconnects. Tweco cable connectors are not supplied with the unit and must be ordered separately.

Optional 115 VAC auxiliary power is not available on VS model.

Pulsed MIG (GMAW-P) capability is not available on VS model.

XMT® 350 CC/CV Control Panel



1. Voltmeter
2. Remote Control Receptacle
3. Process Selector Switch (Rotary Switch)
4. Ammeter
5. Voltage/Amperage Adjustment Control
6. Arc Control

Additional Features

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle.

Low OCV Stick — A built-in, selectable feature, that reduces the Stick mode open-circuit voltage (OCV) to nearly 15 volts when the welding power source is not in use. Eliminates the need for add-on voltage reducers.

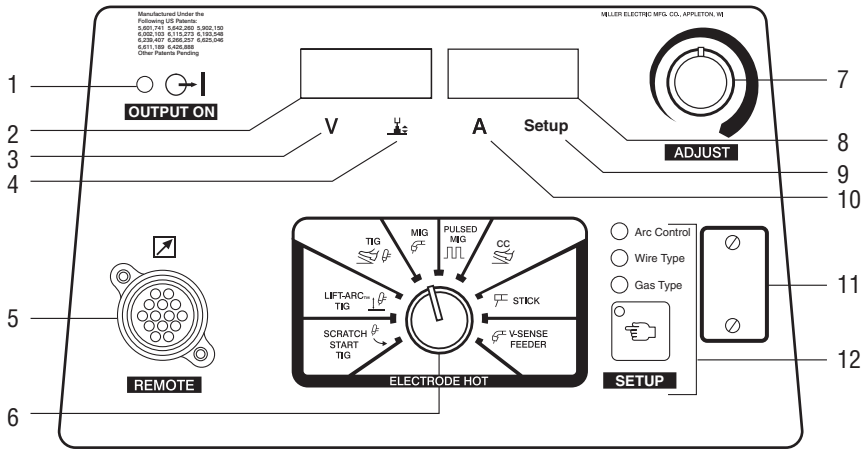
Dinse International-style weld disconnects provide high-quality weld cable connections. Dinse and Tweco connectors are available. When Dinse connectors are specified, two connectors are supplied with the unit.

Optional 115 VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc.

Pulsed MIG (GMAW-P) capabilities with optional Optima™ control reduces spatter and distortion, allows better out-of-position puddle control, and provides potential reduction of fume particle emission.

XMT® 350 MPa Control Panel

The simple, powerful XMT 350 MPa can handle almost any portable welding application.



1. Output ON Indicator Light
2. Left Display
3. Voltage Display
4. Arc Length Indicator
5. Remote Control Receptacle
6. Process Selector Switch (Rotary Switch)
7. Adjustment Control
8. Right Display
9. Setup Indicator
10. Amperage Indicator
11. Remote PC Interface
12. Setup Indicator Lights
    - Arc Control Indicator
    - Wire Type Indicator
    - Gas Type Indicator
    - Setup Button

MPa

MPa: M (MIG), P (Pulse), a (Advanced Arc Control). Advanced arc control enables an improved pulse welding arc. The operator has more control over puddle and bead characteristics using SharpArc™. In addition, the unit provides a more robust and stable arc at very low arc length, reducing heat input, and providing the ability to weld on a wider range of material thickness.

SharpArc™

SharpArc controls welding arc cone width in Pulsed MIG (GMAW-P) welding mode.

If a gas is used other than what is listed on the Pulsed MIG welding program chart (below left), the SharpArc™ can be adjusted to help customize your arc to the gas being used.

Lower SharpArc™ settings widen the arc cone, increase puddle fluidity and flattens the weld bead.

Additional Features

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle.

Dinse International-style weld disconnects provide high-quality weld cable connections. Dinse and Tweco connectors are available. When Dinse connectors are specified, two connectors are supplied with the unit.

Optional 115 VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc.

Built-In Pulsed MIG Programs

The XMT 350 MPa expands the process capability of an XMT 350 with built-in Pulse MIG operation. See the table below for the wide range of Pulsed MIG (GMAW-P) welding applications the XMT 350 MPa can handle.

Wire Types		Gas Types
Steel	.035 STL .045 STL	90% ARGN/10% CO_2 (Argon/Carbon Dioxide) 95% ARGN/5% OXY (Argon/Oxygen)
Metal Core	.035 MCOR .045 MCOR .052 MCOR	90% ARGN/10% CO_2 (Argon/Carbon Dioxide)
Stainless Steel	.035 SSTL .045 SSTL	TRI MIX (Tri-gas mixture: 81% ARGN/18% HE/1% CO_2 [Argon/Helium/Carbon Dioxide]) 98% ARGN/2% OXY (Argon/Oxygen) 98% ARGN/2% CO_2 (Argon/Carbon Dioxide)
Aluminum	.035 AL4X (4000 Series) 3/64 AL4X (4000 Series) .035 AL4X (5000 Series) 3/64 AL4X (5000 Series)	100% ARGN (Argon)
Nickel	.035 NI .045 NI	75% ARGN/25% HE (Argon/Helium)
Silicon Bronze	.035 SIBR	100% ARGN (Argon)
Copper Nickel	.045 CUNI	75% HE/25% ARGN (Helium/Argon)

XMT® 350 Wire Feeder Packages

SuitCase™ X-TREME™ 8VS with XMT® 350 VS and Bernard® Q300 gun #951 096

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ steel wire
No	Yes	No	No	32 lb

SuitCase™ X-TREME™ 12VS with XMT® 350 CC/CV and Bernard® Q300 gun #951 099

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ steel wire
No	Yes	No	No	66 lb

SuitCase™ 8RC with XMT® 350 MPa and Bernard® Q300 gun #951 079

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ steel wire
Yes	Yes	Yes	Yes	32 lb

SuitCase™ 12RC with XMT® 350 MPa and Bernard® Q300 gun #951 078

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ steel wire
Yes	Yes	Yes	Yes	66 lb

SuitCase™ X-TREME™ 8VS with XMT® 350 MPa and Bernard® Q300 gun #951 081

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ steel wire
Yes	Yes	No	No	32 lb

SuitCase™ X-TREME™ 12VS with XMT® 350 MPa and Bernard® Q300 gun #951 080

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ steel wire
Yes	Yes	No	No	66 lb

XR-Control, XMT® 350 MPa and XR-Aluma-Pro™ Gun #951 097

Pulse MIG	Stick MIG TIG	Remote Control Cable	Feeder Remote Control	Weight w/ alum. wire
Yes	Yes	Yes	Yes	57 lb

XMT® 350 CC/CV MIGRunner™ #907 233

Comes Complete With:

- XMT 350 CC/CV power source
- 22A wire feeder
- Bernard® Q™-Gun
- Consumables
- .035/.045 in drive roll kit
- Regulator/flow gauge with gas hose
- MIGRunner Cart with cylinder rack
- Bottom tray will hold optional Coolmate 3 (sold separately)

Genuine Miller Accessories

Optima™ #043 389
A multipurpose, microprocessor-based pulse control for both synergic MIG (wire welding or GMAW) or manual MIG pulsing. Use this control with the XMT 304/350 CC/CV power sources and any Miller wire feeder, including automatic feeders and spool guns. Includes a 25 ft (7.6 m) cord with 14-pin plug. (Not for use with XMT 350 MPa or VS models.)

Extension Cords for Optima
#043 725 25 ft (7.6 m)
#043 726 50 ft (15.2 m)
#043 727 75 ft (22.9 m)

WC-24 Weld Control #137 549
Designed for use with Miller CV power sources supplying 24 VAC and 14-pin receptacles. For use with Spoolmatic 30A spool gun.

WC-115A Weld Control #137 546-01-1
Operates on 115 VAC and is designed for power sources without a 14-pin receptacle. For use with Spoolmatic 30A spool gun. Includes 10 ft (3 m) wall-type plug and power cord.

HF-251D-1 High-Frequency Arc Starter and Stabilizer #042 388
Portable 250 amp, 60% duty cycle unit adds high frequency to the welding circuit to help start the arc when using the DC TIG (GTAW) process. Operates on 115 VAC, 50/50 Hz. See Lit. Index No. AY/5.1.

Process Selector Control #042 872
Designed for use with dual wire feeders, applications where electrical isolation and/or polarity reversing of weld current is required, and for welding process changes. Includes 115 VAC/2 amp receptacle, two 14-pin receptacles and a 10 ft (3 m) 14-pin cord.

Gas Solenoid Kit #195 286
Easy to install, optional gas solenoid kit for TIG welding applications. Kit only works with XMT 350.

RFCS-14 Foot Control #043 554
Heavy-duty foot current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

RHC-14 Hand Control #129 340
Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm). Includes 20 ft (6 m) cord and 14-pin plug.

RMLS-14 #129 337
14-pin plug
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord.

RCC-14 Remote Contactor and Current Control #151 086
14-pin plug. Rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 28 ft (8.5 m) control cord.

RCCS-14 Remote Contactor and Current Control #043 688
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 28 ft (8.5 m) control cord.

Extension Cords for Remote Controls and 24 VAC Wire Feeders
#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.8 m)
14-pin plug to 14-pin socket.
Note: Not for use with Optima or 60M Series.

Inverter Racks

Four or Six-Arc Welding System

The Inverter Rack conveniently houses multiple XMT power sources for multiple welders. Both 4-pack and 6-pack models are available. Features include:

- Provision to parallel power sources or common work connections
- Two lifting eyes for transportation
- Rugged skids for dragging or pushing
- Customer can install up to a maximum of 4 XMT 456 power sources

For detailed information on customized Inverter Rack systems see Lit. Index No. DC/18.81.

Running Gear

MIGRunner™ Cart #195 445
MIGRunner™ XL Cart #195 246
Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.

XMT Cylinder Cart #042 537
Carries two 160 lb (72.6 kg) gas cylinders, or one gas cylinder and one coolant system for TIG (GTAW) welding. Feeder mounts to tray above power source.

Universal Carrying Cart and Cylinder Rack #042 934
Holds power source, and gas cylinder up to 56 in (142.2 cm) high measuring 6 to 9 in (15.2 to 22.8 cm) in diameter.

Genuine Miller Accessories (continued)

Protective Cover

#195 478
Mildew and water resistant, odor-free cover protects your machine's finish. For 300/350 A inverters: XMT, Maxstar and Dynasty.

Wire Feeders/Guns

SuitCase™ 8VS #194 890
SuitCase™ X-TREME™ 12VS #195 500
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8VS) or 12in (12VS) spool of wire. Operates on open-circuit voltage eliminating the need for a control/power cord. See Lit. Index No. M/6.4 and M/6.41.

SuitCase™ 8RC/12RC #194 938/#194 940
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8RC) or 12 in (12RC) spool of wire. Operates using 14-pin control receptacle. See Lit. Index No. M/6.5.

XR Control #181 538
Push-pull wire feed system offers unparalleled performance for aluminum MIG welding. See Lit. Index No. M/1.7.

70 Series
S-74S #195 057
S-74D #195 058
S-74DX #195 059
Wire feeder features Posifeed™ wire drive assembly and handles a variety of wires up to 1/8 in. Comes with FREE Bernard® Q™-Gun. See Lit. Index No. M/3.0.

Spoolmatic® 30A #130 831
A 1-lb, air-cooled spool gun that extends the weld process range by adding a handy portable system for small wire MIG. Rated 200 A at 100% duty cycle. Includes 30 ft (9.1 m) cable assembly. (WC-24 #137 549 for 14 pin.)

Ironmate™ Flux Cored Guns
See Lit. Index No. AY/16.0.

FC-1260
#195 732 10 ft (3 m)
#195 729 15 ft (4.6 m)

FC-1260LM
#194 912 10 ft (3 m)
#194 911 15 ft (4.6 m)

FC-1150
#194 864 10 ft (3 m)
#194 863 15 ft (4.6 m)

Water Coolant Systems

For more information, see the Miller Coolant Systems literature sheet, Index No. AY/7.2.

Coolmate™ 3
#043 007 115 VAC
#043 008 230 VAC
For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy-fill spout.

Coolmate™ V3 #043 009 115 VAC
For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

Coolmate™ 4 #042 288 115 VAC
For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

Coolant #043 810
Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37˚F (-38˚C) or boiling to 227˚F (108˚C). Also contains a compound that resists algae growth.

International-Style Connectors

Note: XMT 350 power sources are equipped with International-style connectors for secondary connections. (Power source is shipped with two 50-mm male International-style plugs for use with #1 or #2 AWG size cable.)

International/Tweco® Adapter #042 465
International/Cam-Lok Adapter #042 466
One-piece adapter with International-style male plug (to power source) on one end and female receptacle (Tweco or Cam-Lok for weld cable connection) on other end.

International-Style Connector Kit

#042 418 50 mm
Accepts #4 or #1/0 AWG cable size. Required if male plugs shipped with power source must be replaced, or if additional plugs are needed.

#042 533 70 mm
Accepts #1/0 or #2/0 AWG cable size. Required if #1/0 or #2/0 AWG size cable is to be used.

Kit includes one International-style male plug which attaches to the work and/or weld cables and plugs into the International-style receptacles on the power source.

Extension Kit for International-Style Cable Connectors

#042 419 50 mm
Accepts #4 or #1/0 AWG size cable.

#042 534 70 mm
Accepts #1/0 or #2/0 AWG size cable.

Used to adapt or extend weld and/or work cables. Kit includes one male International-style plug and one in-line female International-style receptacle.

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
XMT® 350 CC/CV	**#907 161** **#907 161-01-1** **#907 161-01-2** **#907 161-01-4**	208 – 575 VAC with Auto-Line™ 208 – 575 VAC with Auto-Line™ and Auxiliary Power 230 – 460 VAC with Auto-Line™ and Auxiliary Power and **CE** 208 – 575 VAC with Auto-Line™ and Tweco connectors		
XMT® 350 VS	**#907 224**	208 – 575 VAC with Auto-Line™ (without 14-pin, Tweco connectors)		
XMT® 350 MPa	**#907 366** **#907 366-01-1** **#907 366-01-4**	208 – 575 VAC with Auto-Line™ 208 – 575 VAC with Auto-Line™ and Auxiliary Power 208 – 575 VAC with Auto-Line™ and Tweco connectors		
XMT® 350 Wire Feeder Packages		See page 5		
Inverter Racks (full or empty)		See Lit. Index No. DC/18.81		
Accessories				
Optima™ MIG Pulse Control	**#043 389**	For CC/CV models only. Not for use with XMT 350 MPa or VS.		
Optima™ Extension Cords		See page 6		
WC-24	**#137 549**	For use with Spoolmatic® 30A and power sources **with** 14-pin		
WC-115A	**#137 546-01-1**	For use with Spoolmatic® 30A and power sources **without** 14-pin		
Process Selector Control	**#042 872**			
Gas Solenoid Kit	**#195 286**	For XMT 350 models only		
HF-251D-1 HF Starter/Stabilizer	**#042 388**	See Lit. Index No. AY/5.1		
RFCS-14	**#043 554**	Foot control		
RHC-14	**#129 340**	Hand control		
RMLS-14	**#129 337**	Rocker switch		
RCC-14	**#151 086**	Fingertip control		
RCCS-14	**#043 688**	Fingertip control		
Extension Cords (For 24 VAC wire feeders and remote controls)		See page 6. Not to be used with Optima, 60M or XR-M		
Running Gear				
MIGRunner™ Cart	**#195 445**			
MIGRunner™ XL Cart	**#195 246**			
XMT Cylinder Cart	**#042 537**			
Universal Carrying Cart and Cylinder Rack	**#042 934**			
Protective Cover	**#195 478**			
Wire Feeders/Guns				
SuitCase™ 8VS / X-TREME™ 12VS	**#194 890 / #195 500**	See Lit. Index No. M/6.4 and M/6.41		
SuitCase™ 8RC / 12RC	**#194 938 / #194 940**	See Lit. Index No. M/6.5		
XR Control	**#181 538**	See Lit. Index No. M/1.7		
70 Series	**#195 057** **#195 058** **#195 059**	S-74S. See Lit. Index No. M/3.0 S-74D. See Lit. Index No. M/3.0 S-74DX. See Lit. Index No. M/3.0		
Spoolmatic® 30A Spool Gun	**#130 831**	Includes 30 ft (9.1 m) cable assembly		
Ironmate™ Flux Cored Guns		See Lit. Index No. AY/16.0		
Water Coolant Systems		See page 7. See Lit. Index No. AY/7.2		
International-Style Connectors		See page 7		

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

Dimension™ Series

Issued May 2007 • Index No. DC/19.2

Multiprocess Welding Power Source

Quick Specs

CE

Heavy Industrial Applications
- Fabrication and Construction
- Heavy Manufacturing
- MRO — Maintenance/Repair
- Pressure Tank/Vessel Fabrication
- Pipe Welding
- Shipbuilding
- Refineries and Foundries
- Railcar Manufacturing
- Earth-Moving Equipment Manufacturing

Processes
- MIG (GMAW)
- Stick (SMAW)
- TIG (GTAW)
- Flux Cored (FCAW)
- Air Carbon Arc (CAC-A) Cutting and Gouging
- Submerged Arc (SAW)

Input Power 3-Phase Power on all models

Rated Output
302: 300 A at 32 VDC, 100% Duty Cycle
452/562: 450 A at 38 VDC, 100% Duty Cycle
652/812: 650 A at 44 VDC, 100% Duty Cycle

Weight
302: 361 lb (164 kg)
452/562: 424 lb (192 kg)
652/812: 545 lb (247 kg)

The Power of Blue®

DC multiprocess capability provides versatility and outstanding arc performance in CV (MIG) and CC (Stick, TIG).

Internal digital voltage control (DVC) enables operator to preset weld voltage in the CV mode before striking an arc.

Built-in arc control lets you get in tight without sticking the electrode. An electrode compensation circuit ensures consistent arc control performance regardless of the electrode size.

Hot Start™ makes it easier to start difficult-to-start Stick electrodes such as E-6010 and E-7018.

Line voltage compensation ensures consistent weld performance by keeping output power constant even if primary input power varies by ±10%.

Simple control panel features single range amperage/voltage adjustment. Provides easy, efficient operation.

Digital voltmeter and ammeter are easy to read, even at 30 ft (9.2 m).

Dimension 452/562

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.

14-pin receptacle provides quick, direct connection to Miller 14-pin wire feeders and accessories.

115 V duplex receptacle provides 15 amps of auxiliary power.

Remote on/off capabilities allow operator to turn power source on/off from a distance.

Remote voltage control allows operator to change voltage from feeder.

Power efficient for exceptional value and return on your investment.

Fan-On-Demand™ operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.

Enclosed circuit boards provide additional protection from contaminants resulting in longer service life.

PC board protection prevents the wire feeder power or other stray voltages (less than 115 VAC) from harming the power source PC board.

Power cord strain relief provided for your convenience at installation.

TRUE BLUE® 3 YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN USA
APPLETON, WI

Miller®

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

Dimension™ 302 Specifications (Subject to change without notice.)

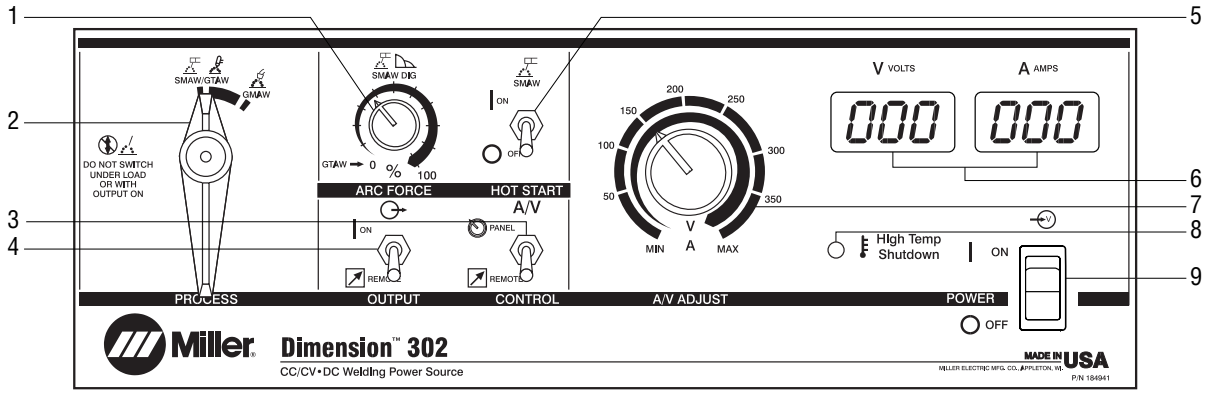
Rated Output	Amperage/Voltage Range	Max. Open-Circuit Voltage*	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	460 V	575 V	KVA	KW	Dimensions	Net Weight
300 A at 32 VDC, 100% Duty Cycle	15–375 A in CC mode	59 VDC	57.5	50	25	20	20	12.9	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 30-1/2 in (775 mm) including strain relief	361 lb (164 kg)
	10–32 V in CV mode	43 VDC	69	60	30	24	23.7	13.4		

**Open-circuit voltages in CV mode are factory set at values less than indicated for CC.*

Certified to both the Canadian and U.S. Standards for welding equipment.

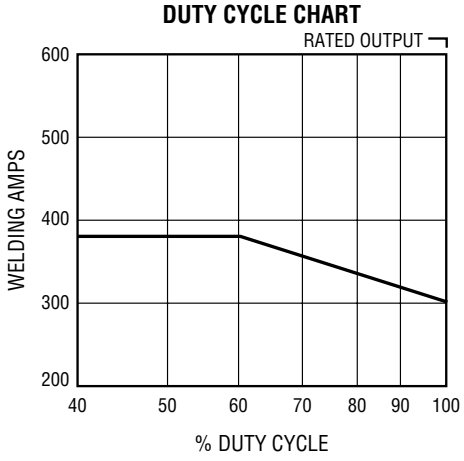
50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

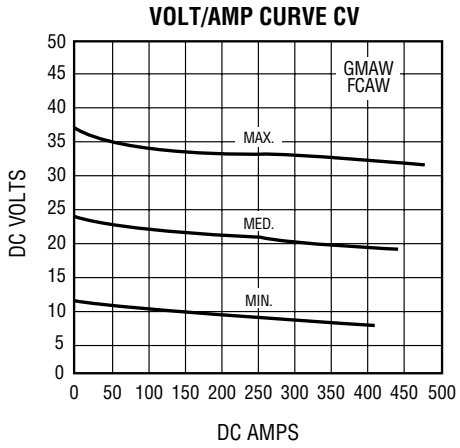
Control Panel

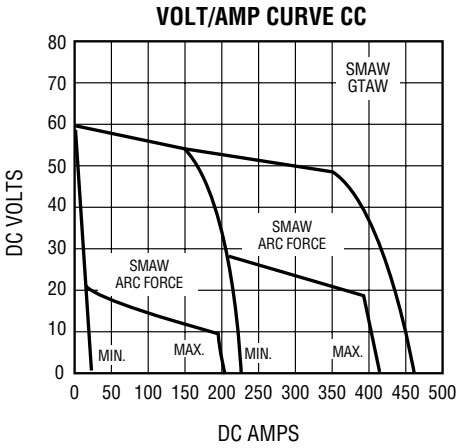


1. Arc Force (DIG) Control
2. Process Selector Switch
3. Remote Amperage/Voltage Control Switch
4. Output Switch (Contactor)
5. Hot Start Switch
6. Digital Meters
7. Amperage/Voltage Adjustment Control
8. High Temperature Shutdown Light
9. Power Switch with Indicator Light

Performance Data







Miller

Dimension™ 452/562 Specifications (Subject to change without notice.)

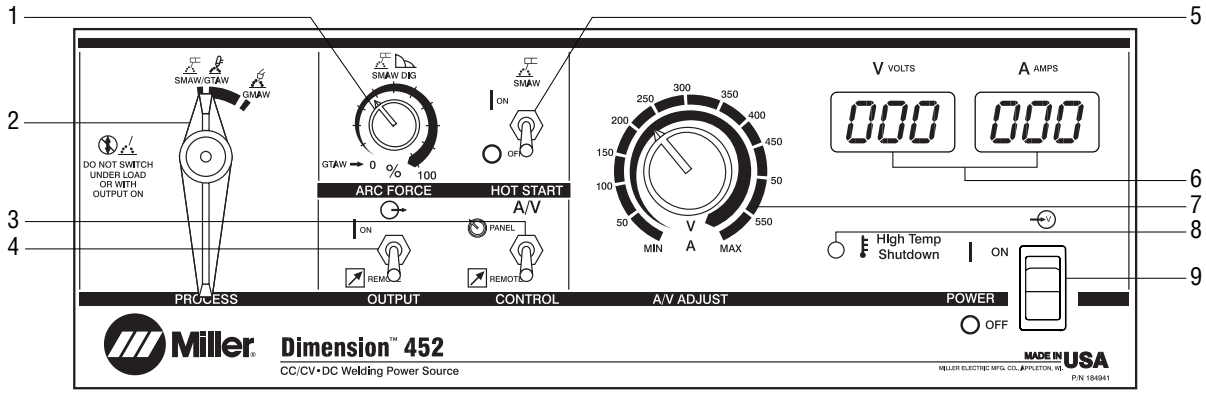
Rated Output	Amperage/Voltage Range	Max. Open-Circuit Voltage*	Amps Input at Rated Output, 50/60 Hz 200 V	230 V	380 V	400 V	440 V	460 V	520 V	575 V	KVA	KW	Dimensions	Net Weight
450 A at 38 VDC, (36.5 VDC for CE Model) 100% Duty Cycle	20–565 A in CC mode	62 VDC	91	79	48	46	41	39	34	31	31.4	22	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	424 lb (192 kg)
	10–38 V in CV mode	42 VDC	104	90	52.5	51	46	45	38	36	35.3	22.3		

**Open-circuit voltages in CV mode are factory set at values less than indicated for CC.*

Certified to both the Canadian and U.S. Standards for welding equipment.

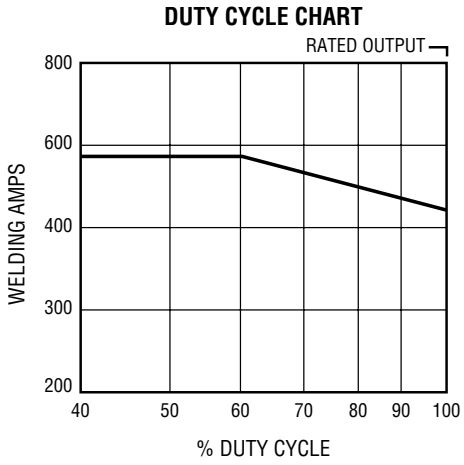
50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

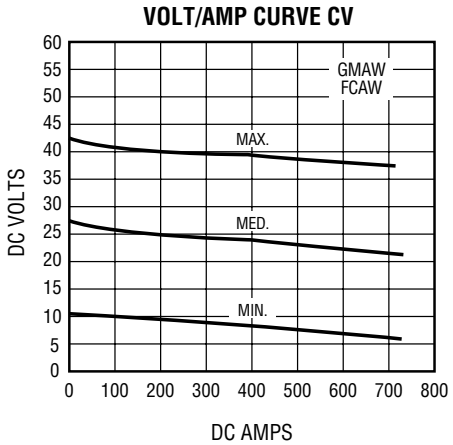
Control Panel

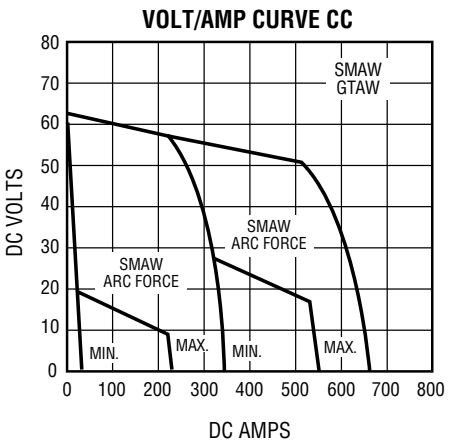


1. Arc Force (DIG) Control
2. Process Selector Switch
3. Remote Amperage/Voltage Control Switch
4. Output Switch (Contactor)
5. Hot Start Switch
6. Digital Meters
7. Amperage/Voltage Adjustment Control
8. High Temperature Shutdown Light
9. Power Switch with Indicator Light

Performance Data







Dimension™ 652/812 Specifications (Subject to change without notice.)

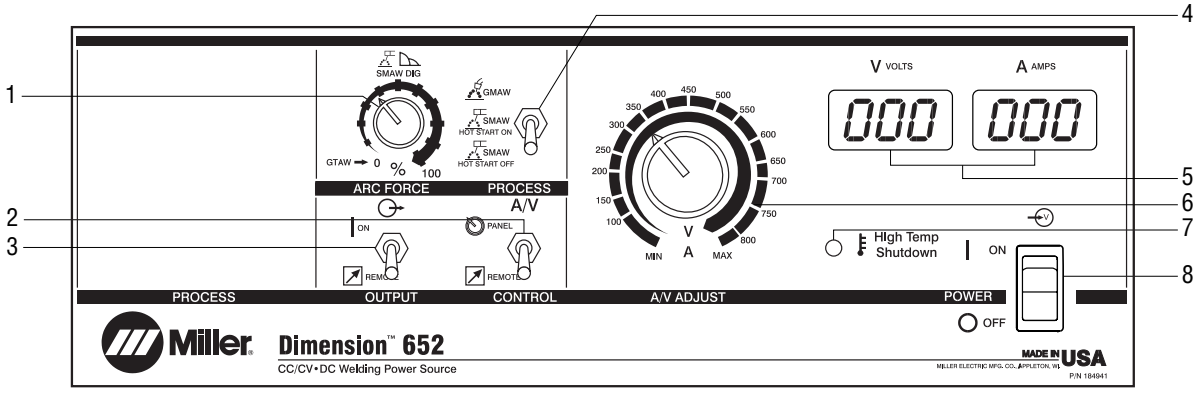
Rated Output	Amperage/Voltage Range	Max. Open-Circuit Voltage*	Amps Input at Rated Output, 50/60 Hz 230 V	380 V	400 V	440 V	460 V	520 V	575 V	KVA	KW	Dimensions	Net Weight
650 A at 44 VDC, 100% Duty Cycle	50–815 A in CC mode	71 VDC	126	77	73	66	63	54	50.4	50	34.8	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	545 lb (247 kg)
	10–65 V in CV mode	40 VDC											

**Open-circuit voltages in CV mode are factory set at values less than indicated for CC.*

Certified to both the Canadian and U.S. Standards for welding equipment.

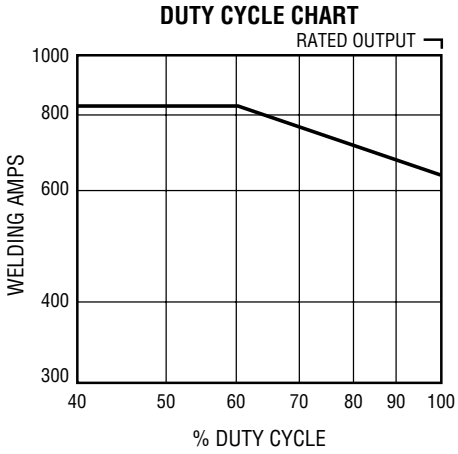
50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

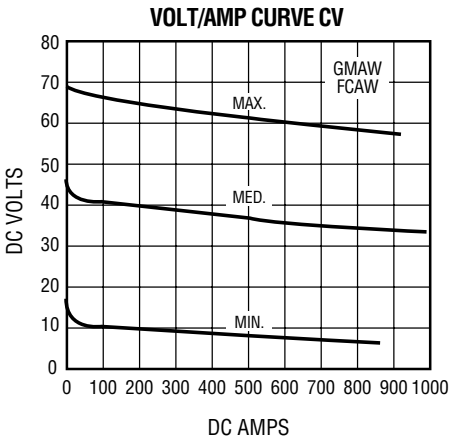
Control Panel

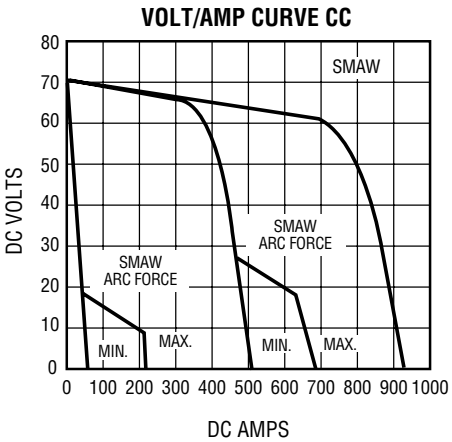


1. Arc Force (DIG) Control
2. Remote Amperage/Voltage Control Switch
3. Output Switch (Contactor)
4. Process Selector Switch
5. Digital Meters
6. Amperage/Voltage Adjustment Control
7. High Temperature Shutdown Light
8. Power Switch with Indicator Light

Performance Data







Genuine Miller Options

Air Filter Kit #042 939 Field
Reusable air filter helps protect internal components from dust and dirt, reducing need for maintenance and providing extended service life. Easily attaches and detaches from front of the power source.

Ground Current Sensor #195 048 Field
Disables power source if weld current is present on primary ground.

Genuine Miller Accessories

Industrial MIG Kit #195 197
Includes 15 ft (4.6 m), 2/0 power cable and work lead with clamp, regulator/flow meter with 15 ft (4.6 m) gas hose, 15 ft (4.6 m) MIG gun and consumable kit.

Polarity Control #042 871
This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Control Selector #042 872
Allows you to easily change weld processes without changing cables—from TIG to MIG or TIG to Stick. Also includes features of Polarity Control. Can be used with any constant-current, constant-voltage or multiprocess CC/CV welding power source.

Extension Cables for 14-Pin Plugs to 14-Pin Sockets
#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.8 m)
This extension cord makes a direct connection between the power source and the accessory control or wire feeder. No messy splicing or adapting required.

Standard Running Gear #042 886
The large 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source around and over cables and cracks. Very easy to install. Handles double as weld cable holder.

Standard Cylinder Rack #042 887
Holds two cylinders. Only installs on Standard Running Gear.

HF-251D-1 High-Frequency Arc Starter/Stabilizer #042 388
This portable 250 A, 60% duty cycle unit adds high frequency to the welding circuit to help start the arc when using the TIG (GTAW) process. Operates on 115 VAC 50/60/100 Hz. See Lit. Index No. AY 5.1.

Water Coolant Systems

For more information, see Miller Coolant Systems Lit. Index No. AY/7.2.

Coolmate™ 3
#043 007 115 VAC
#043 008 230 VAC
For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy fill spout.

Coolmate™ V3 #043 009 115 VAC
For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

Coolmate™ 4 #042 288 115 VAC
For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

Coolant #043 810
Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37˚F (-38˚C) or boiling to 227˚F (108˚C). Also contains a compound that resists algae growth.

Wire Feeders

22A #193 066
Simple, reliable, 24 VAC constant-speed semiautomatic wire feeder, best suited for small diameter wires. Accommodates up to 60 lb (27.2 kg) spool of welding wire when using optional wire reel assembly. Comes with FREE Bernard® Q™-Gun! See Lit. Index No. M/11.0.

24A #195 112
Simple, reliable, 24 VAC constant-speed semiautomatic wire feeder, best suited for small diameter wires. Remote voltage is standard. Features four gear-driven drive rolls for larger wire sizes. Accommodates up to 60 lb (27.2 kg) spool of welding wire when using optional wire reel assembly. Comes with FREE Bernard® Q™-Gun! See Lit. Index No. M/11.0.

70 Series

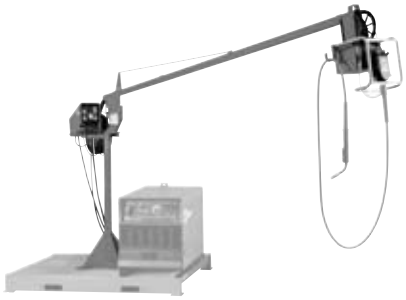
Single Wire Models
S-74S #195 057
S-74D #195 058
S-74D #195 058-01-1 High Speed
S-74DX #195 059
S-74DX #195 059-01-1 High Speed

Dual Wire Models
D-74S #195 060
D-74D #195 061
D-74DX #195 062

Heavy-duty, industrial, constant-speed 24 VAC semiautomatic wire feeders in single and dual models, with available digital meters. Ideal for high-duty-cycle MIG welding (GMAW) and Flux Cored welding (FCAW). Accommodates a wide variety of wire sizes and types. Comes with FREE Bernard® Q™-Gun! Dual wire feeder models include two FREE Q-Guns. See Lit. Index No. M/3.0.

SuitCase™ 8VS #194 890
SuitCase™ X-TREME™ 12VS #195 500
Lightweight, portable, voltage-sensing wire feeders include secondary contactor and gas valve. Require drive roll kit. See Lit. Index Nos. M/6.4 and M/6.41.

XR™-Control #181 538
Push-pull wire feed system offers unparalleled performance for aluminum MIG welding. See Lit. Index No. M/1.7.



Swingarc™ Boom-Mounted Wire Feeders
Single and dual 24 VAC semiautomatic wire feeders are available with 12 ft (3.7 m) and 16 ft (4.9 m) booms. Ideal for long reach and complete maneuverability when working on large weldments, or in hard-to-reach areas. See Lit. Index No. M/13.11.

Remote Controls and Switches

Remote On/Off Control #042 869
Allows you to turn your power source on or off from a distance of 20 ft (6 m). This is especially useful if your power source is located up in a mezzanine.

RMLS-14 #129 337
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord and 14-pin plug.

RCC-14 Remote Contactor and Current Control #151 086
Rotary-motion (side to side) fingertip control. Fastens to TIG torch using two Velcro strips. Allows complete current and contactor control at operator's fingertips. Includes 28 ft (8.5 m) cord and plug.

RCCS-14 Remote Contactor and Current Control #043 688
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 28 ft (8.5 m) control cord.

RHC-14 Hand Control
#129 340
20 ft (6 m) cord
#300 350
100 ft (30.5 m) cord
Miniature hand control with 14-pin plug for remote current and contactor control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm).

RFCS-14 Foot Control #043 554
Heavy-duty foot current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Power Source				
Dimension™ 302	**#903 215*** **#903 216***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Dimension™ 452	**#903 254*** **#903 255***	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Dimension™ 562	**#907 288**	380/400/440 V, 50 Hz w/**CE**		
Dimension™ 652	**#903 379*** **#903 379-01-12***	230/460/575 V, 60 Hz 230/460/575 V, 60 Hz w/Sub Arc upgrade		
Dimension™ 812	**#907 289**	380/400/440 V, 50 Hz w/**CE**		
Air Filter Kit	**#042 939**	Field		
Ground Current Sensor	**#195 048**	Field		
Wire Feeders				
22A	**#193 066**	See Lit. Index No. M/11.0		
24A	**#195 112**	See Lit. Index No. M/11.0		
70 Series		See page 6		
SuitCase™ 8VS	**#194 890**	See Lit. Index No. M/6.4		
SuitCase™ X-TREME™ 12VS	**#195 500**	See Lit. Index No. M/6.41		
XR™-Control	**#181 538**	See Lit. Index No. M/1.7		
Swingarc™ Boom Feeders		See Lit. Index No. M/13.0		
Remote Controls				
Remote On/Off Control	**#042 869**			
RMLS-14	**#129 337**	Rocker switch		
RCC-14	**#151 086**	Fingertip control (side to side)		
RCCS-14	**#043 688**	Fingertip control (up and down)		
RHC-14	**#129 340** **#300 350**	Hand control w/20 ft (6 m) cord and 14-pin plug Hand control w/100 ft (30.5 m) cord and 14-pin plug		
RFCS-14	**#043 554**	Foot control		
Miscellaneous				
Industrial MIG Kit	**#195 197**	Includes 15 ft (4.6 m), 2/0 power cable and work lead with clamp, regulator/flow meter with 15 ft (4.6 m) gas hose, 15 ft (4.6 m) MIG gun and consumables kit		
Polarity Control	**#042 871**			
Process Control Selector	**#042 872**			
Extension Cables		See page 5		
Standard Running Gear	**#042 886**			
Standard Cylinder Rack	**#042 887**			
HF-251D-1 Starter/Stabilizer	**#042 388**	See Lit. Index No. AY/5.1		
Coolant Systems		See page 5		
Coolant	**#043 810**			
Primary Power Cable				
Secondary Welding Cables				
Work Cable and Clamp				

Date: **Total Quoted Price:**

* *Certified to both the Canadian and U.S. Standards for welding equipment.*

** *50/60 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.*

Distributed by:

Miller

Litho in USA

Dimension™ NT 450

Issued May 2007 • Index No. DC/19.5

Multiprocess Welding Power Source

Quick Specs

Heavy Industrial Applications
Fabrication and Construction
MRO-Maintenance Repair
Pressure Tank/Vessel Fabrication
Pipe Welding and Shipbuilding
Refineries and Foundries
Railcar Manufacturing
Heavy Equipment Manufacturing

Processes
MIG (GMAW)
Stick (SMAW)
TIG (GTAW)
Flux Cored (FCAW)
Air Carbon Arc Cutting and Gouging (CAC-A) (max 5/16 in carbons)

Input Power 3-Phase Power
Rated Output 450 A at 38 VDC, 100% Duty Cycle
Weight 376 lb (171 kg)

The Power of Blue®

DC multi-process capability provides versatility and outstanding arc performance in CV (MIG) and CC (Stick and TIG).

Internal digital voltage control (DVC) enables operator to preset weld voltage in the CV mode before striking an arc.

Process selector switch automatically sets contactor requirements, eliminating confusion caused by several switch combinations and making this machine very "operator-friendly."

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Line voltage compensation keeps power constant even if power input varies by ±10%.

Thermal overload protection helps prevent machine damage if the duty cycle is exceeded or airflow is restricted.

Inductance/Dig Control with pre-settable digital display to optimize MIG/Stick performance.

Fan-On-Demand™ which operates only when needed. This feature reduces noise, energy use and the amount of contaminants pulled through machine.

115 VAC duplex receptacle provides 15 amps of auxiliary power.

Enhanced environmental protection: all critical components housed in protective enclosures.

Help codes help troubleshoot and service power source. Help codes are displayed on the volt/amp meters. Reduces the time needed to get the machine back into service.

Excellent power efficiency for exceptional value and return on your investment.

Specifications (Subject to change without notice.)

CC CV 3 Phase

Rated Output at 100% Duty Cycle	Amperage Range	Voltage Range	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz, 3-Phase 230 V	460 V	575 V	KVA	KW	Dimensions	Weight
450 A at 38 VDC	5–500 A in CC mode	10–38 V in CV mode	78 VDC in CC and CV mode	57 2.18*	29 1.04*	23 0.84*	22.6 0.87*	21.0 0.29*	H: 32-1/2 in (826 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm)**	Net: 376 lb (171 kg)

Certified to both the Canadian and U.S. Standards for welding equipment.

**While idling. **Including strain relief.*

TRUE BLUE® 3 YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN USA
APPLETON, WI

Miller®

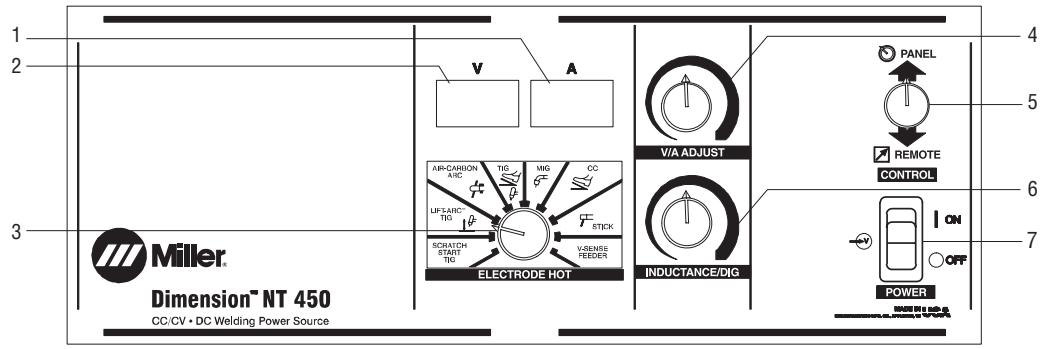
Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

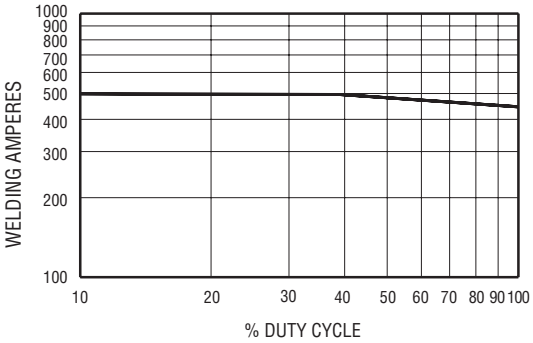
Control Panel



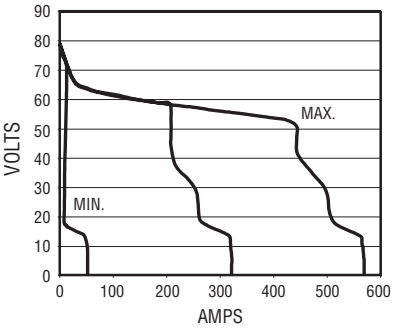
1. Ammeter
2. Voltmeter
3. Mode Switch
4. Voltage/Amperage Adjust Control
5. Remote/Panel Switch
6. Inductance/Dig Control
7. Power Switch

Performance Data

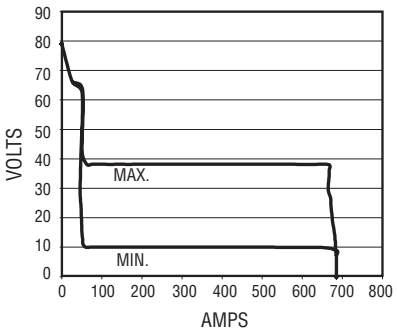
DUTY CYCLE CHART



CC VOLT/AMP CURVE



CV VOLT/AMP CURVE



Genuine Miller Accessories

Industrial MIG Kit #195 197
Includes 15 ft (4.6 m), 2/0 power cable and work lead with clamp, regulator/flow meter with 15 ft (4.6 m) gas hose, 15 ft (4.6 m) MIG gun and consumable kit.

Polarity Control #042 871
This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Extension Cables for 14-Pin Plugs to 14-Pin Sockets
#122 973 25 ft (7.6 m)
#122 974 50 ft (15.2 m)
#122 975 75 ft (22.8 m)
This extension cord makes a direct connection between the power source and the accessory control or wire feeder. No messy splicing or adapting required.

Standard Running Gear #042 886
The large 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source around and over cables and cracks. Very easy to install. Handles double as weld cable holder.

Standard Cylinder Rack #042 887
Holds two cylinders. Only installs on Standard Running Gear.

HF-251D-1 High-Frequency Arc Starter/ Stabilizer #042 388
This portable 250 amp, 60% duty cycle unit adds high frequency to the welding circuit to help start the arc when using the TIG (GTAW) process. Operates on 115 VAC 50/60/100 Hz. See Lit. Index No. AY 5.1.

Water Coolant Systems

For more information, see Miller Coolant Systems Lit. Index No. AY/7.2.

Coolmate™ 3
#043 007 115 VAC
#043 008 230 VAC
For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy fill spout.

Coolmate™ V3 #043 009 115 VAC
For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

Coolmate™ 4 #042 288 115 VAC
For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

Coolant #043 810
Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37˚F (-38˚C) or boiling to 227˚F (108˚C). Also contains a compound that resists algae growth.

Wire Feeders

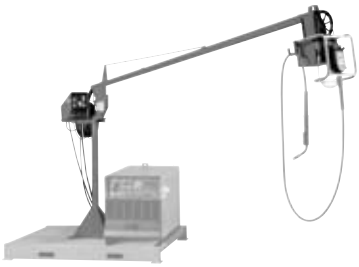
70 Series
Single Wire Models
S-74S #195 057
S-74D #195 058
S-74D #195 058-01-1 High Speed
S-74DX #195 059
S-74DX #195 059-01-1 High Speed
Dual Wire Models
D-74S #195 060
D-74D #195 061
D-74DX #195 062
Heavy-duty, industrial, constant-speed 24 VAC semiautomatic wire feeders in single and dual models, with available digital meters. Ideal for high-duty-cycle MIG welding (GMAW) and Flux Cored welding (FCAW). Accommodates a wide variety of wire sizes and types. Comes with FREE Bernard® Q™-Gun! Dual wire feeder models include two FREE Q-Guns. See Lit. Index No. M/3.0.

22A #193 066
Simple, reliable, 24 VAC constant-speed semiautomatic wire feeder, best suited for small diameter wires. Accommodates up to 60 lb (27.2 kg) spool of welding wire when using optional wire reel assembly. Comes with FREE Bernard® Q™-Gun! See Lit. Index No. M/11.0.

24A #195 112
Simple, reliable, 24 VAC constant-speed semiautomatic wire feeder, best suited for small diameter wires. Remote voltage is standard. Features four gear-driven drive rolls for larger wire sizes. Accommodates up to 60 lb (27.2 kg) spool of welding wire when using optional wire reel assembly. Comes with FREE Bernard® Q™-Gun! See Lit. Index No. M/11.0.

SuitCase™ 8VS #194 890
SuitCase™ X-TREME™ 12VS #195 500
Lightweight, portable, voltage-sensing wire feeders include secondary contactor and gas valve. Require drive roll kit. See Lit. Index Nos. M/6.4 and M/6.41.

XR™-Control #181 538
Push-pull wire feed system offers unparalleled performance for aluminum MIG welding. See Lit. Index No. M/1.7.



Swingarc™ Boom-Mounted Wire Feeders
Single and dual 24 VAC semiautomatic wire feeders are available with 12 ft (3.7 m) and 16 ft (4.9 m) booms. Ideal for long reach and complete maneuverability when working on large weldments, or in hard-to-reach areas. See Lit. Index No. M/13.11.

Remote Controls and Switches

Remote On/Off Control #042 869
Allows you to turn your power source on or off from a distance of 20 ft (6 m). This is especially useful if your power source is located up in a mezzanine.

RMLS-14 #129 337
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord and 14-pin plug.

Genuine Miller Accessories (Continued)

RCC-14 Remote Contactor and Current Control #151 086
Rotary-motion (side to side) fingertip control. Fastens to TIG torch using two Velcro strips. Allows complete current and contactor control at operator's fingertips. Includes 28 ft (8.5 m) cord and plug.

RCCS-14 Remote Contactor and Current Control #043 688
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 28 ft (8.5 m) control cord.

RHC-14 Hand Control
#129 340 20 ft (6 m) cord
#300 350 100 ft (30.5 m) cord
Miniature hand control with 14-pin plug for remote current and contactor control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm).

RFCS-14 Foot Control #043 554
Heavy-duty foot current and contactor control. Includes 20 ft (6 m) cord and 14-pin plug.

Ordering Information

Equipment	Stock No.	Description	Qty.	Price
Dimension™ NT 450	**#907 256**	230/460/575 V, 60 Hz		
Recommended Wire Feeders				
70 Series		See page 3		
22A/24A	**#193 066/#195 112**	See Lit. Index No. M/11.0		
SuitCase™ 8VS	**#194 890**	See Lit. Index No. M/6.4		
SuitCase™ X-TREME™ 12VS	**#195 500**	See Lit. Index No. M/6.41		
XR™-Control	**#181 538**	See Lit. Index No. M/1.7		
Swingarc™ Boom Feeders		See Lit. Index No. M/13.0		
Remote Controls				
Remote On/Off Control	**#042 869**			
RMLS-14	**#129 337**	Rocker switch		
RCC-14	**#151 086**	Fingertip control (side to side)		
RCCS-14	**#043 688**	Fingertip control (up and down)		
RHC-14	**#129 340** **#300 350**	Hand control w/20 ft (6 m) cord and 14-pin plug Hand control w/100 ft (30.5 m) cord and 14-pin plug		
RFCS-14	**#043 554**	Foot control		
Miscellaneous				
Industrial MIG Kit	**#195 197**	Includes 15 ft (4.6 m), 2/0 power cable and work lead with clamp, regulator/flow meter with 15 ft (4.6 m) gas hose, 15 ft (4.6 m) MIG gun and consumables kit		
Polarity Control	**#042 871**			
Extension Cables		See page 2		
Standard Running Gear	**#042 886**			
Standard Cylinder Rack	**#042 887**			
HF-251D-1 Starter/Stabilizer	**#042 388**	See Lit. Index No. AY/5.1		
Coolant Systems		See page 3		
Coolant	**#043 810**			
Primary Power Cable				
Secondary Welding Cables				
Work Cable and Clamp				

Date: **Total Quoted Price:**

Distributed by:

Miller®

Litho in USA

Issued Feb. 2008 • Index No. PWS/1.0

PipePro® Welding System

Root-Fill-Cap Welding

Multiprocess Pipe Welding Systems

Quick Specs

Pipe Welding Applications
- Process Piping
- Offshore Piping
- Onshore Piping
- Pipe Fabrication
- Field Construction

Processes
- Stick (SMAW)
- TIG (GTAW)
- Air Carbon Arc Cutting and Gouging (CAC-A) (3/8 in carbons max.)
- MIG (GMAW)
- RMD™ Pro (Modified Short Circuit)
- Pro-Pulse™ MIG (GMAW-P)
- Pulsed MIG (GMAW-P)
- Flux Cored (FCAW)

Rated Output 450 A at 44 VDC, 100% Duty Cycle

Voltage Range 10–44 V

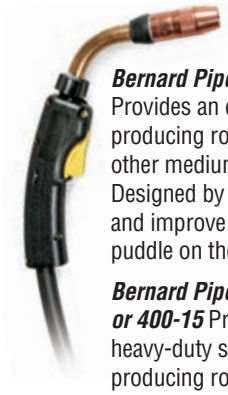
Ship Weight
- PipePro 450 RFC: 163 lb (72.9 kg)
- PipePro 12RC SuitCase: 25.5 lb (11.6 kg)
- PipePro DX Feeder: 45 lb (20.4 kg)
- PipePro Dual DX Feeder: 87 lb (35.5 kg)
- Bernard® PipeWorx 250-15: 9 lb (4.1 kg)
- Bernard PipeWorx 300-15: 10 lb (4.6 kg)
- Bernard PipeWorx 400-15: 10 lb (4.6 kg)

The Power of Blue®

The **PipePro® 450 RFC power source** can be combined with either the **PipePro SuitCase™** or **PipePro DX Bench Feeders** and **Bernard PipeWorx™ Guns** to offer a total solution for pipe welding applications in the shop or field.

PipePro DX Bench Feeder
Provides a reliable wire feeder solution for shop applications. The dual-feeder version allows the operator to easily switch from one process/wire for root pass welding to another process/wire for fill and cap welding.

PipePro 450 RFC
Provides one versatile power source to produce pipe welds using conventional and advanced processes in shop and field applications.



Bernard PipeWorx 250-15
Provides an ergonomic solution to producing root passes on pipe and other medium-duty applications. Designed by welders to reduce fatigue and improve visibility of the puddle on the root pass.

Bernard PipeWorx 300-15 or 400-15 Provides a heavy-duty solution to producing root, fill and cap welds on pipe.

PipePro 12RC SuitCase
Provides a durable wire feeder solution for field applications. The impact-resistant case design protects the wire and drive mechanism from moisture, dust and contamination.

IMPROVED WELD PERFORMANCE

Regulated Metal Deposition (RMD™ Pro)
Precisely controlled short-circuit transfer technology provides welders with an easy to use welding process with excellent puddle control for the root pass. Calm, stable arc/puddle reduces weld training and improves quality.

Pro-Pulse™
This method of pulse welding is easier to use than conventional pulse in out-of-position pipe welding applications. This is accomplished through precise control of the arc and puddle even in narrow joints, which provides optimum molten puddle control for out-of-position welding. Precise control of puddle produces excellent side wall fusion on all pipe joint designs.

TRUE BLUE® 3 YR. WARRANTY

Power source is warranted for 3 years, parts and labor.

MADE IN USA
APPLETON, WI

Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

International Headquarters
Phone: 920-735-4505
USA FAX: 920-735-4134
Canadian FAX: 920-735-4169
International FAX: 920-735-4125

Web Site
www.MillerWelds.com

ISO 9001:2000 REGISTERED QUALITY SYSTEM

PipePro® 450 RFC Welding System (See page 3 for programs available for PipePro 450 RFC.)

The PipePro 450 Welding System provides one versatile solution for pipe welding in a package for both field and shop fabrication. Standard welding processes include **new** patented RMD™ Pro and Pro-Pulse™, conventional MIG, GMAW-P, FCAW, Stick, TIG, and Air Carbon Arc Cutting. The RMD Pro and Pro-Pulse welding processes are optimized for steel and stainless steel pipe. Programs are provided for the most common gases, wire types and wire diameters used in the pipe welding industry. Contact Miller for more information on less common materials and gas combinations.

PipePro® 450 RFC Features

Auto-Line™	Allows for **any** input voltage hook-up (190 – 630 V, 50/60 Hz) with no manual linking. Compensates for voltage spikes and drops within the entire range.
1/4-turn connectors	Allow for faster installation of system and reduces thread stripping.
Multiprocess	Select from Stick, TIG, MIG, GMAW-P, RMD Pro, Pro-Pulse MIG, FCAW and Air Carbon Arc.
Wind Tunnel Technology™	Circulates air over components that require cooling, not over electronic circuitry, which reduces contaminants and improves reliability.
Field or Shop	Can be used with either a SuitCase feeder for field construction, or a single or dual bench-style feeder for shop fabrication.
Fan-On-Demand™	Cooling system operates only when needed. Reduces amount of airborne contaminants pulled through the machine.
Easy to operate	Simple front panel layout makes it easy to select programs.

Specifications (Subject to change without notice.)

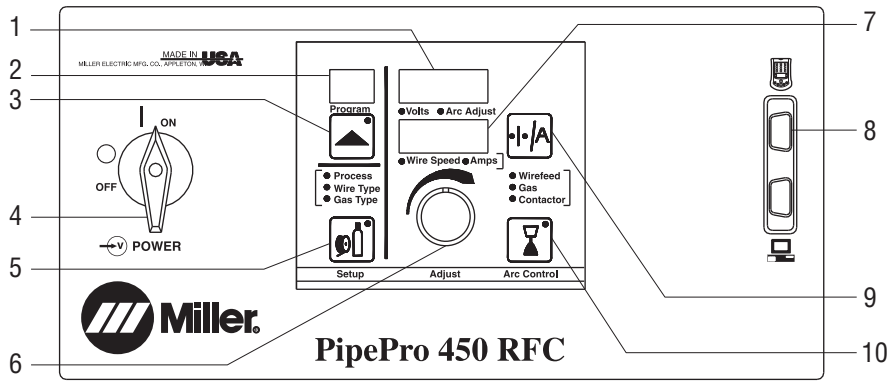
CC/CV DC 3 Phase

Rated Output	Voltage Range	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Amps Input at Rated Output for Typical Voltages +/- 10%, 50/60 Hz 208 V	230 V	400 V*	460 V*	575 V	KVA	KW	Dimensions	Ship Weight
450 A at 44 VDC, 100% Duty Cycle	10 – 44 V	5 – 600 A	80 VDC	67	59	34	29	23	23.8	22.9	H: 41 in (1041 mm) W: 15-1/2 in (394 mm) D: 22 in (559 mm)	163 lb (72.9 kg)

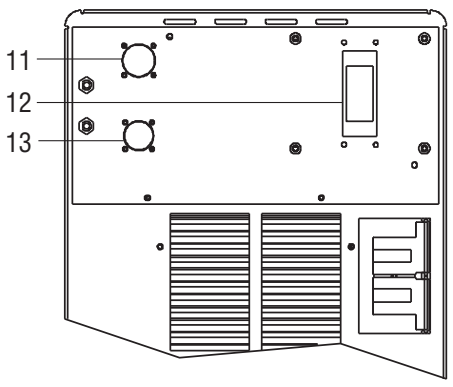
**Note: CE units are limited to 400 V nominal.*

Control Panels

Front Panel



Back Panel

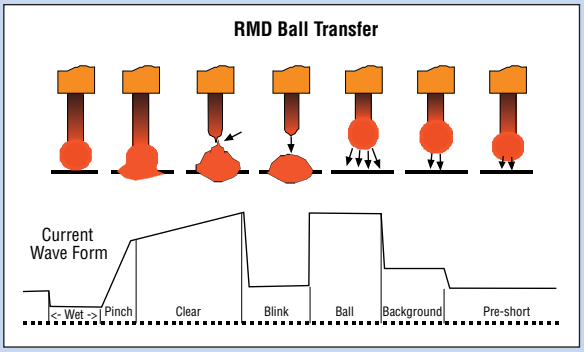


1. Voltage/Arc Adjust Display Meter
2. Program Display
3. Program # Select
4. Power Switch
5. Process Setup Button
   - Weld Process
   - Wire Size and Type
   - Gas Type
6. Control Knob
7. Wire Speed/Amperage Digital Display Meter
8. Palm™/PC RS-232 Ports
9. Wire Feed/Amperage Select
10. Arc Control and Inductance Control
11. Peripheral Connector
12. Remote Connector
13. Wirefeed Connector

Welding Process Capabilities

RMD™ (Regulated Metal Deposition) Pro

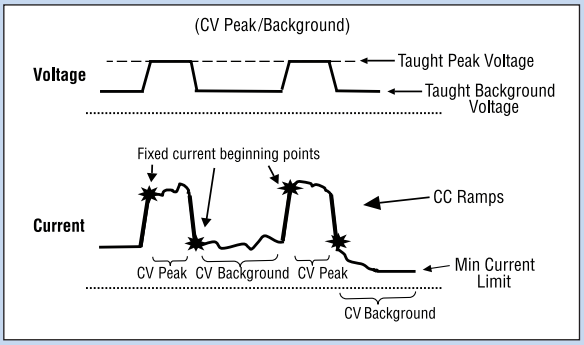
A precisely controlled short-circuit metal transfer that provides a calm, stable arc and weld puddle. This provides less chance of cold lap or lack of fusion, less spatter and a higher quality root pass on pipe. The stability of the weld process lessens the puddle manipulation required by the welder and is more tolerant to hi-lo conditions, reducing training requirements. Weld bead profiles are thicker than conventional root pass welds which can eliminate the need for a hot pass, improving weld productivity. In some stainless steel applications, it may be possible to eliminate the backing (purge) gas to further improve productivity and reduce welding costs.



- Ideally suited to root pass welding
- Consistent side wall fusion
- Less weld spatter
- Tolerant to hi-lo fit-up conditions
- More tolerant of tip to work distance
- Less welder training time
- Thicker root passes can eliminate hot pass
- Eliminate backing gas on some stainless steel applications

Pro-Pulse™

This method of pulse welding provides a shorter arc length, narrower arc cone and less heat input than with traditional spray pulse transfer. Since the process is synergic, arc wandering and variations in tip-to-work distances are virtually eliminated. This provides easier puddle control for both in-position and out-of position welding, reducing welder training time. The process also improves fusion and fill at the toe of the weld, permitting higher travel speeds and higher deposition. This process coupled with RMD Pro for root pass welding permits welding procedures with one wire and one gas to eliminate process switch-over time.



- Ideally suited to fill and cap pass welding
- Easier puddle control than conventional spray pulse
- Shorter arc lengths and narrow arc cone for out-of-position welding
- More tolerant of tip to work variation
- Improve fusion and fill at toe of weld
- Less heat input reduces interpass cooling time and improves weld cycle time
- Enables one-wire with one-gas weld procedures

PipePro® Welding Programs

RMD Pro programs designed for root pass welding on deep groove welds in all positions.

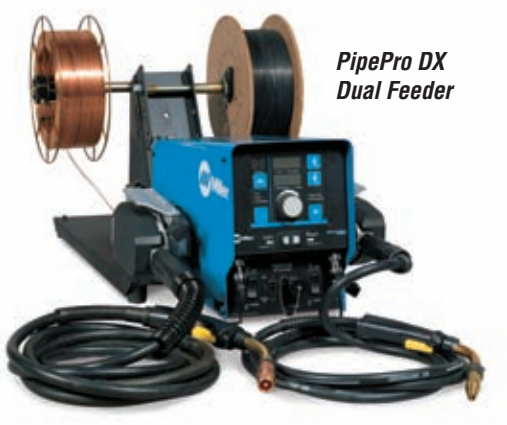
Process	Wire Type	Diameter	Gas Mixtures
RMD Pro	**Steel** E70	.035/.040/.045 in	CO_2, C25, C10, C15
	Steel E80	.035 in	CO_2, C15
	Stainless Steel 308 and 316	.035/.040/.045 in	TRI-H, Ox2, C2
	Metal Core	.045 in	C10, C15
	Chrome Steel 5 Chrome	.045 in	C25

Ox2 = 98% Ar, 2% O_2
HE25 = 75% Ar, 25% He
C2 = 98% Ar, 2% CO_2
TRI-A = 81% Ar, 18% He, 1% CO_2
TRI-H = 90% He, 7.5% Ar, 2.5% CO_2
TRI3 = 69% Ar, 30% He, 1% CO_2

Pro-Pulse programs designed for fill and cap welding in all positions.

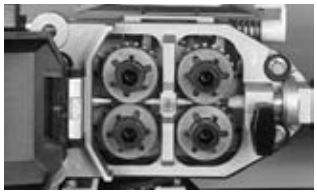
Process	Wire Type	Diameter	Gas Mixtures
Pro-Pulse™	**Steel** E70	.035/.040/.045/.052	C10, C15
	Steel E70	.052/.062	C10
	Steel E80	.040/.045 in	C15
	Stainless Steel 308/309/312/316	.035/.045 in	TRI-H, TRI-A, C2, Ox2
	Metal Core	.045/.052 in	C10, C15
	Inconel 625	.045 in	HE25
	Duplex Stainless	.040/.045 in	TRI3

PipePro® Single and Dual Feeder Features



PipePro DX Dual Feeder

Tool less rotatable drive assembly allows operator to rotate the drive housing, eliminating severe bends in the wire feed path which reduce gun liner life. Also aids in feeding difficult wires.



Dual tension control adds flexibility for the operator to fine-tune the pressure on the wire independently when feeding a variety of wires.

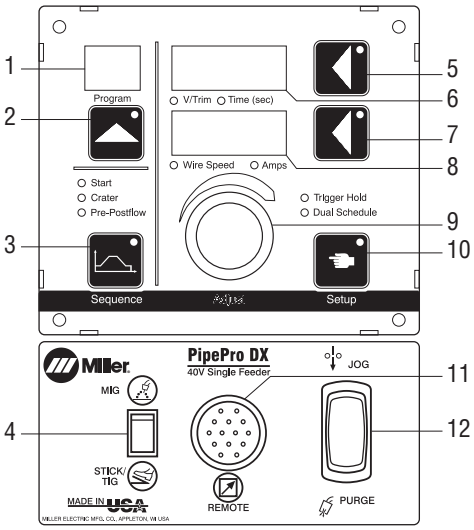
Trigger Receptacle	Oriented in a downward position to reduce potential damage.
Trigger Hold	Reduces operator fatigue by allowing the operator to make long welds without having to hold the trigger continuously.
Posifeed™ Wire Drive Assembly	• Quick-change drive rolls • Quick-release, calibrated drive-roll pressure adjustment arm allows drive roll change without losing spring preload setting • Floating positive drive systems provide trouble-free feeding on a variety of wires
Stored Programs	Allows the operator to select weld programs from the feeder (8 on a single feeder or 4 on each of the feeders of the dual) to improve cycle time from root to fill and cap.
Remote Trigger Select	Allows operator to change programs (weld process and stored parameters) without returning to the feeder.
Dual Schedule	Allows the operator to switch between two sets of parameters to provide consistent penetration and improve pipe weld quality in fixed position.
Weld Sequence Control	Provides gas preflow and postflow for welding of stainless steel and high alloy pipe materials. Improves start and stop conditions by providing run-in, crater and burn-back controls.
Range Locks	Allows weld parameters to be adjusted within a specified range of set-point to ensure welding procedures are maintained on the shop floor.

Specifications (Subject to change without notice.)

Input Power	Wire Feed Speed Range	Wire Diameter Capacity	Input Welding Circuit Rating	Maximum Spool Size Capacity	Dimensions Single	Dimensions Dual	Net Weight Single	Net Weight Dual
40 VDC, 10 Amps	50–780 IPM (1.3–19.8 MPM)	.023–1/8 in (0.6–3.2 mm)	100 Volts, 750 Amps, 100% Duty Cycle	60 lb (27 kg)	H: 14 in (356 mm) W: 12-1/2 in (318 mm) D: 27 in (686 mm)	H: 14 in (356 mm) W: 12-1/2 in (318 mm) D: 35 in (889 mm)	45 lb (20.4 kg)	87 lb (35.5 kg)

IP Rating= IP 21

Single Feeder Control Panel



PipePro DX Model

1. Program Display
2. Program # Select
3. Weld Sequence
4. MIG/Stick(TIG)
5. Voltage/Time Select
6. Voltage/Time Display Meter
7. Wire Feed/Amperage Select
8. Wire Speed/Amperage Display Meter
9. Control Knob
10. Trigger Hold/Dual Schedule Control
11. Standard 14-Pin Receptacle
12. Jog/Purge

PipePro® Feeder Drive Roll Kits (Order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 4 drive rolls, the necessary guides and feature an anti-wear sleeve for the inlet guide.

Wire size	"V" groove for hard wire	"V" knurled for hard-shelled cored wires
.035 in (0.9 mm)	**#151 026**	**#151 052**
.040 in (1.0 mm)	**#161 190**	—
.045 in (1.1/1.2 mm)	**#151 027**	**#151 053**
.052 in (1.3/1.4 mm)	**#151 028**	**#151 054**
1/16 in (1.6 mm)	**#151 029**	**#151 055**
.068/.072 in (1.8 mm)	—	**#151 056**
5/64 in (2.0 mm)	—	**#151 057**
3/32 in (2.4 mm)	—	**#151 058**

Wire Guides

Wire size	Inlet Guide	Intermediate Guide
.023 – .040 in (0.6 – 1.0 mm)	**#150 993**	**#149 518**
.045 – .052 in (1.1 – 1.4 mm)	**#150 994**	**#149 519**
1/16 – 5/64 in (1.6 – 2.0 mm)	**#150 995**	**#149 520**
3/32 – 7/64 in (2.4 – 2.8 mm)	**#150 996**	**#149 521**

PipePro® 12RC SuitCase™ Features

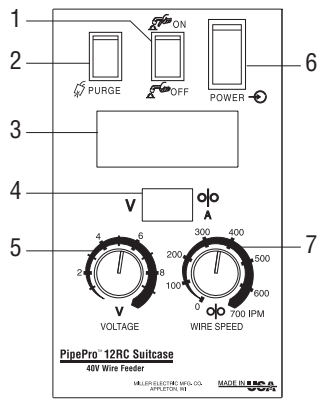
Rugged Construction	Designed for use in field construction.
Remote Voltage Control	Comes standard with PipePro 12RC SuitCase.
Standard Gas Solenoid	Controls gas flow.
Flame-Retardant Case	Totally enclosed and impact resistant, this case provides strength and durability while protecting components and weld wire from moisture, dust and contaminants.
Drive Roll Accessibility	Easy to install wire, adjust tension and change drive rolls.
Digital Meter	Wirefeed and voltage display comes standard on SuitCase.
Portable	Lightweight feeder can be used with 150 ft cables from power source.

Available in CE or CSA version.

Specifications (Subject to change without notice.)

Input Power	Welding Power Source Type	Input Welding Circuit Rating	Wire Feed Speed Range	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
40 VDC, 10 Amps	Constant-Voltage (CV)	500 Amps at 100% Duty Cycle	75 – 700 IPM (1.9 – 17.7 m/min)	Solid Wire: .023 – 5/64 in (0.6 – 2.0 mm) Flux Cored: .030 – 5/64 in (0.8 – 2.0 mm)	12 in (305 mm) 44 lb (20 kg)	H: 16 in (406 mm) W: 7-1/4 in (184 mm) D: 20 in (508 mm)	25.5 lb (11.6 kg)

Control Panel



1. Trigger Hold Switch
2. Purge Switch
3. Meter Display
4. Volt/Amp Switch
5. Voltage Control
6. Power Control Switch
7. Wire Speed Control

Drive Roll Kits (1 kit required, order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include 2 drive rolls, necessary guides and feature an anti-wear sleeve for the inlet guide.

Wire size	"V" groove for hard wire	"V" knurled for hard-shelled cored wires
.023/.025 in (0.6 mm)	**#087 131**	—
.030 in (0.8 mm)	**#079 594**	—
.035 in (0.9 mm)	**#079 595**	**#079 606**
.040 in (1.0 mm)	**#161 189**	—
.045 in (1.1/1.2 mm)	**#079 596**	**#079 607**
.052 in (1.3/1.4 mm)	**#079 597**	**#079 608**
1/16 in (1.6 mm)	**#079 598**	**#079 609**
.068/.072 in (1.8 mm)	—	**#089 984**
5/64 in (2.0 mm)	—	**#079 610**

Bernard® PipeWorx™ Guns Features

The PipeWorx 250-15 Gun is recommended for root pass welding, especially in fixed-position applications where visibility is difficult. The PipeWorx 300-15 or 400-15 are recommended for fill and cap pass welding with Flux Cored arc or Pulsed MIG welding processes. In roll welding applications where one gas and one wire are used to make the weld, the PipeWorx 400 can be used to deposit the root pass. (A smaller nozzle diameter should be considered for improved puddle visibility and should be used for stainless steel root pass welding without purge gas.)

Versatility	Can be used for MIG (solid and metal cored wires), Pulsed MIG, and Flux Cored (shielded and self-shielded wires).
Ergonomics	Compact, lightweight gun with high-amperage capability reduces operator fatigue. improving productivity.
Visibility	The combination of tapered tips and nozzles and 60˚ neck provides excellent visibility on root passes in pipe joints.
Centerfire™ Tip	Provides "drop-in" tip with no threads providing quick changeover. No tools are required.

Specifications (Subject to change without notice.)

Bernard® Model	100% Duty Cycle NEMA	100% Duty Cycle CE	60% Duty Cycle CE	35% Duty Cycle CE	Gas Type	Cable Length	Net Weight
PipeWorx 250-15	300 A	250 A	300 A	365 A	100% CO_2	15 ft (4.6 m)	9 lb (4.1 kg)
	—	210 A	250 A	300 A	80% Argon/20% CO_2		
PipeWorx 300-15	350 A	320 A	370 A	470 A	CO_2 Gas	15 ft (4.6 m)	10 lb (4.6 kg)
	—	270 A	270 A	390 A	80% Argon/20% CO_2		
PipeWorx 400-15	400 A	350 A	425 A	520 A	CO_2 Gas	15 ft (4.6 m)	10 lb (4.6 kg)
	—	275 A	350 A	425 A	80% Argon/20% CO_2		

Key Gun Consumables

Description	Part Number	Package Quantity
.035 in Tapered Tip	TT-035[1]	10
.040 in Tapered Tip	TT-039	10
.045 in Tapered Tip	TT-045	10
.035 in Tip	T-035	10
.040 in Tip	T-039	10
.045 in Tip	T-045[2,3]	10
.052 in Tip	T-052	10
1/16 in Tip	T-062	10
.035 – .045 Liner	43115[1,2,3]	1
.045 – .062 Liner	44215	1

[1]*Standard part on PipeWorx 250-15.* [2]*Standard part on PipeWorx 300-15.*
[3]*Standard part on PipeWorx 400-15.*

Description	Part Number	Package Quantity
Nozzle 5/8 in D	NS-5818C[2]	10
Nozzle 5/8 in ID	N-5818C[3]	10
Nozzle 1/2 in ID	NS-1218C	10
Nozzle 3/4 in ID	N-3418C	10
Nozzle 3/8 in ID Tapered Tip	NT-3800C	10
Nozzle 3/8 in ID Tapered Tip	NST-3800B	10
Nozzle 3/8 in ID Extended Tapered Tip	NST-38XTB[1]	10
Diffuser	D-1[3]	10
Diffuser	DS-1[1,2]	10
Q Tube Assembly 60°	QT2-60[1,2,3]	1
Q Tube Assembly 80°	QT2-80	1
O-Ring	4929	10

Genuine Miller Accessories

Dual Schedule Switches

(For PipePro DX models only.)

DSS-9
#071 833
A two-position slide switch which attaches to the gun handle and is used to select the desired welding condition for dual schedule purposes. The gun trigger operates as a standard trigger.

PipeWorx 400-15 Gun and Cable Packages

5 ft Cable and Gun Package shown.

#300 241 5 ft cable and gun package
#300 242 25 ft cable and gun package
#300 243 50 ft cable and gun package

Packages include (5 ft) interconnect and feeder control cable, (25 or 50 ft) feeder control extension cable, (50 ft) work-sense lead and PipeWorx 400-15 gun.

Individual Cables for Typical Installations

Typical Installation Setup	Interconnect and Feeder Control Cable "Y"	Feeder Control Extension Cable	Work-Sense Lead
5 ft	195 185	—	195 397
25 ft	195 185	195 395	195 397
50 ft	195 185	195 401	195 397
100 ft*	195 185	195 396	195 398

** For 150 ft add one #195 401 Feeder Control Extension Cable.*

PipePro® Welding System Components

PipePro® DX Dual Feeder
#300 228 *(shown)*

PipePro® DX Feeder
#300 227

Polarity Control
#042 871 *(optional)*
Used to switch between DCEN (straight polarity) for TIG welding and DCEP (reverse polarity) for MIG or Stick welding.

PipePro® 450 RFC
#907 296

PipeWorx® 400-15
#300 240 *(shown)*

PipeWorx® 300-15
#195 400 *(not shown)*

PipePro® System Cart
#300 334
Dimensions: 54 H x 32 W x 53 D in (1372 x 813 x 1346 mm). Weight (cart only): 196 lb (89 kg).

Work Sense Lead Receptacle
50 ft Work Sense Lead #195 397

PipeWorx® 250-15
#195 399

Wire Reel Assembly (for 60 lb coil)
#108 008 *(optional, not shown)*

Remote Control Receptacle
(for optional remotes)

RFCS-14 HD	**#194 744**
RCC-14	**#151 086**
RCCS-14	**#043 688**
RHC-14	**#129 340**

Coolmate™ V3 #043 009
(optional)

#300 380 PipePro® Ready TIG Torch Kit
150 A, air-cooled (WP-17V-25 model) (shown)

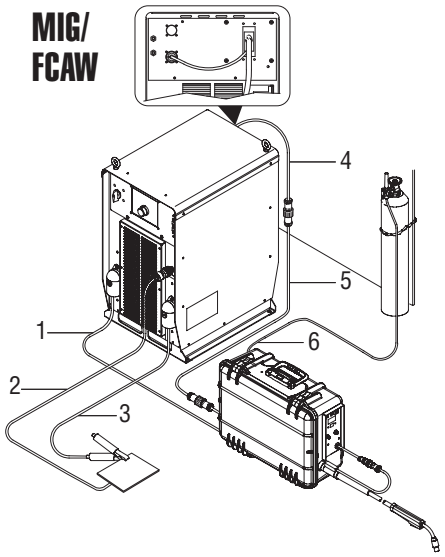
#300 381 PipePro® Ready TIG Torch Kit
200 A, air-cooled (WP-26V-25 model)

#300 382 PipePro® Ready TIG Torch Kit
250 A, water-cooled (WP-20V-25 model)

#300 383 PipePro® Ready TIG Torch Kit
350 A, water-cooled (WP-18V-25 model)

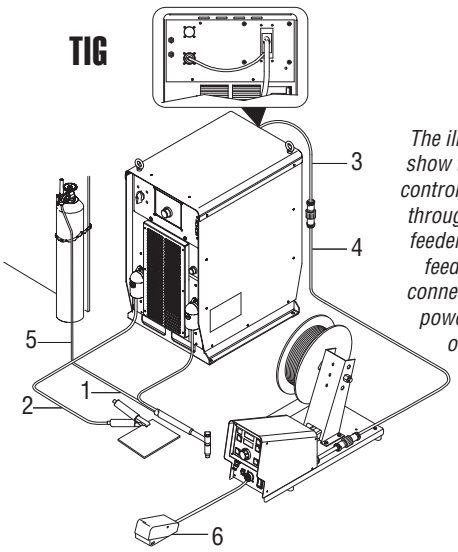
Installation Diagrams

MIG/ FCAW



1. Weld Cable *(contact your distributor)*
2. Work-Sense Lead
3. Work Cable *(contact your distributor)*
4. Interconnect and Feeder Control Cable
5. Feeder Control Extension Cable *(not required if feeder is on or near power source)*
6. Gas Hose *(contact your distributor)*

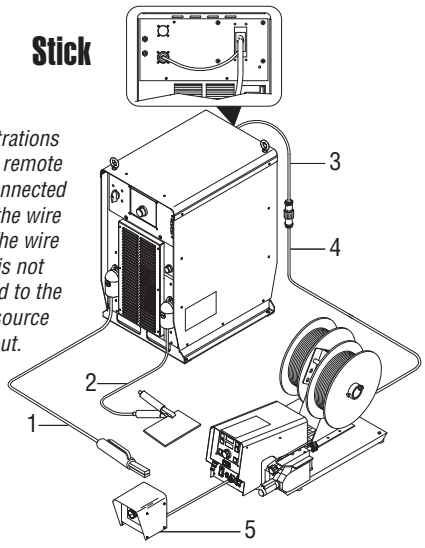
TIG



1. Weld Cable and TIG Torch *(see page 7)*
2. Work Cable *(contact your distributor)*
3. Interconnect and Feeder Control Cable
4. Control Extension Cable
5. Gas Hose *(contact your distributor)*
6. Remote with 25 ft cable *(see page 8)*

The illustrations show the remote control connected through the wire feeder. The wire feeder is not connected to the power source output.

Stick



1. Weld Cable and Electrode Holder *(contact your distributor)*
2. Work Cable *(contact your distributor)*
3. Interconnect and Feeder Control Cable
4. Control Extension Cable
5. Remote with 25 ft cable *(see page 8)*

Note: Size 2/0 weld cable is recommended with PipePro 450 RFC.

Ordering Information (Select a power source, wire feeder and cable package for complete system.)

Power Source and Accessories	Stock No.	Description	Qty.	Price
PipePro® 450 RFC Inverter Power Supply *Add a Wire Feeder and a Cable and Gun Package to create a system.*	**#907 296** **#907 297**	190 – 630 V, Auto-Line™ **CE**, 400 V, Auto-Line™		
PipePro® 450 System Cart	**#300 334**	Cart with cylinder rack for power source, feeder, cooler, and polarity switch		
Bench-Style Wire Feeder and Accessories				
PipePro® Bench-Style Feeders	**#195 407**	Single feeder		
PipePro® DX Bench-Style Feeders	**#300 227** **#300 228**	Single feeder Dual feeder		
Control Detachment Kit *Allows separation of the control module from the wire drive assembly and base.*	**#300 233** **#300 234** **#300 235**	Field Kit, 10 ft (3 m). For PipePro DX single feeder only Field Kit, 25 ft (7.6 m). For PipePro DX single feeder only Field Kit, 25 ft (7.6 m). For PipePro DX dual feeder only		
Feeder Cart	**#142 382**			
Spool Covers	**#057 607** **#090 389**	For single feeder or left side of dual feeder For right side of dual feeder		
Wire Reel Assembly	**#108 008**	For 60 lb (27 kg) coil (*Reel and Spool Covers cannot be installed if the wire drive assembly is in a rotated position.)*		
Reel Covers	**#058 256** **#091 668**	For single feeder or left side of dual feeder. For 60 lb (27 kg) coil For right side of dual feeder. For 60 lb (27 kg) coil		
Drive Roll Kit *(Required)*		See page 5		
Dual Schedule Switches	**#071 833**	DSS-9 *(PipePro DX models only)*		
SuitCase-Style Wire Feeder and Accessories				
PipePro® 12RC SuitCase™ Feeder	**#195 392**			
Flowmeter Kit	**#195 217**			
Filter Inline Shielding Gas	**#195 189**			
Drive Roll Kit *(Required)*		See page 5		
PipeWorx 400-15 Gun and Cable Packages		**Select a Package OR Select Individual Cables (see page 6)**		
*Includes interconnect and feeder control cable (5 ft), feeder control extension cables, work-sense lead and PipeWorx gun. Does **NOT** include weld cable, work cable, work clamp, and gas regulator/flowmeter.*	**#300 241** **#300 242** **#300 243**	5 ft (1.5 m) cable and gun package 25 ft (7.6 m) cable and gun package 50 ft (15.2 m) cable and gun package		
Individual Cables for Typical Installations				
Interconnect and Feeder Control Cable	**#195 185**	5 ft (1.5 m) *(one required per system)*		
Feeder Control Extension Cable *(Not required if feeder is on or near power source.)*	**#195 395** **#195 401** **#195 396**	25 ft (7.6 m) 50 ft (15.2 m) 100 ft (30.5 m)		
Work-Sense Lead	**#195 397** **#195 398**	50 ft (15.2 m) 150 ft (45.7 m)		
Individual MIG/FCAW Guns and Consumables				
Bernard® PipeWorx Guns	**#195 399** **#195 400** **#300 240**	250-15 Gun. See page 6 for consumables 300-15 Gun. See page 6 for consumables 400-15 Gun. See page 6 for consumables		
Accessories for TIG and Stick				
RFCS-14 HD RCC-14 RCCS-14 RHC-14	**#194 744** **#151 086** **#043 688** **#129 340**	Heavy-duty foot control Side-to-side fingertip control Up-and-down fingertip control Hand current control and contactor		
Remote Control Adapter	**#300 248**	For PipePro® 12RC Suitcase™ and #195 407 Single Feeder. Connects remote control cable to feeder control cable		
Polarity Control	**#042 871**	Switches between DCEP (reverse polarity) and DCEN (straight polarity)		
HF-251D-1	**#042 388**	High-frequency remote arc starter with gas solenoid, 115 VAC		
Coolmate® V3	**#043 009**	115 VAC		
Weldcraft® TIG Torches		**(See page 7)**		

Date: **Total Quoted Price:**

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